



GENERAL

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MODEL IDENTIFICATION

BODY	SERIES NAME	BODY STYLE	MODEL DESIGNATION	PASS OR SEATS
B-CAR	IMPALA	4-Dr. Sedan	1BL69	6
		2-Dr. Coupe	1BL47	6
		4-Dr. Station Wagon	1BL35	2-Seat*
	CAPRICE CLASSIC	4-Dr. Sedan	1BN69	6
		2-Dr. Coupe	1BN47	6
		4-Dr. Station Wagon	1BN35	2-Seat*

*Station wagon, third seat available -- RPO AQ4.

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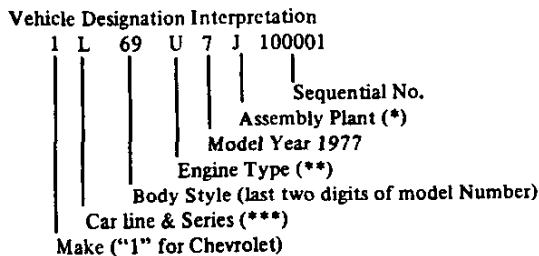
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SERIAL NUMBERS AND IDENTIFICATION

ONLY BASIC DESIGNATIONS SHOWN

VEHICLE IDENTIFICATION NUMBER



- *J - Janesville-GMAD S - St. Louis-GMAD
- #1 - Oshawa-Canadian Plt.
- D - L6-250 (110 H.P.)
- **U - V8-305 (145 H.P.)
- L - V8-350 (170 H.P.)
- ***L - Impala Models N - Caprice Classic

EXAMPLE: The twenty-fifth Chevrolet vehicle built at GMAD Janesville if it were a 1BL69 model (Impala Sedan) with a V8-305 (145 H.P.) engine would bear VIN number 1L69U7J100025.

Location Stamped on plate attached to top left hand of instrument panel.

TRANSMISSION IDENTIFICATION

Example: S7E01

Type	Source	Model Year	Production ^o
Designation	Designation	1977	Month & Date
AD	Y (Toledo)	7	E01D*

AD	Turbo Hydra-matic	L-6 engine	D - Parma Y - Toledo
AF	Turbo Hydra-matic	V-8 engine	D - Parma Y - Toledo

Location:
Turbo Hydra-matic Stamped on right side of transmission, above filler plug.

o-Month: E denotes May; (see below) 01 denotes 1st day
Alpha Characters used in identifying the calendar Month

- | | | | |
|--------------|-----------|---------------|--------------|
| A - January | D - April | K - July | R - October |
| B - February | E - May | M - August | S - November |
| C - March | H - June | P - September | T - December |

*-The letter "D" or "N" following the date numerals indicates day or night shift.

ENGINE IDENTIFICATION

Example: F1210CCF

Source	Production*	Type
Designation	Month & Date	Designation
F (Flint)	1210	CCF

250 Cubic Inch L-6, Base Engine

CCF - Regular production engine, Turbo Hydra-matic

305 Cubic Inch V-8 engine (RPO LG3)

CPR - Optional, Turbo Hydra-matic, 2-bbl. carb.

350 Cubic Inch V-8 engine, (RPO LM1)

CLL - Optional, Turbo Hydra-matic, 4-bbl. carb.

Location:

- 6-cylinder engine stamped on pad on right side of cylinder block to rear of distributor.
- 8-cylinder engine Stamped on pad at front right side of cylinder block

*-Month: December, 12; 10th day of December, 10

REAR AXLE IDENTIFICATION

- NB - 2.56 Axle
- NC - 2.73 Axle
- NF - 3.08 Axle

Location, Identification Number
Bottom left or right of axle tube adjacent to carrier housing.

See Power Train section for additional information.

EXTERIOR EQUIPMENT

STANDARD EXTERIOR EQUIPMENT SEDANS AND COUPES

<u>FRONT</u>	Impala	Caprice Classic
Windshield Reveal Moldings	X	X
Concealed Windshield Wipers with Articulated Left Arm	X	X
Bumper Mounted Parking Lamps	X	X
Bright Upper and Lower Grille, Caprice Emblem on Header Panel	X	X
Argent Grille, Bow Tie Emblem on Header Panel	X	X
Bright Headlamp Bezels on Header Panel	X	X
'Chevrolet' Script on Left Side of Grille	X	X
Bright Grille Frame Moldings	X	X
Bright Fender and Hood Moldings	X	X
 <u>SIDE</u>		
Fender Mounted Front Markers	X	X
Rear Quarter Marker Lamps	X	X
'Impala' Script on Sail Panel	X	X
'Caprice Classic' Nameplate on Sail	X	X
Rectangular 5" Outside L.H. Rear View Mirror	X	X
Rocker Panel Moldings—Bright	X	X
Bright Body Side Lower Molding Paint Filled	X	X
Colored PVC Body Side Molding with Bright Mylar Border	O	O
Flush Door Handle—Bright	X	X
Bright Door Belt Molding	X	X
Wheel Trim Covers	O	X
Hub Caps	X	X
Painted Roof Drip Moldings	X	X
Bright Roof Drip Moldings	X	X
Bright Door Upper Frame Moldings	X	X
Wheel Opening Moldings	O	X
Vinyl Top or Two-Tone Paint Molding	O **	O
Quarter Window Reveal Molding Bright and Painted	47	47
Bright Quarter Lower Molding Painted Filled	X	X
 <u>REAR</u>		
Deck Lid Nameplate—"Chevrolet"	X	X
Rear Window Reveal Molding—Bright	X	X
Four Tail and Stop Lamps and Two Back-Up Lamps	X	X

O Optional Usage

** Color keyed to top.

EXTERIOR EQUIPMENT

STANDARD EXTERIOR EQUIPMENT STATION WAGONS

	Impala	Caprice Estate
FRONT		
Bright Windshield Reveal Moldings	X	X
Concealed Windshield Wipers with Articulated Left Arm	X	X
Bumper Mounted Parking Lamps	X	X
Bright Upper and Lower Grille, Caprice Emblem on Header Panel		X
Argent Grille, Bow Tie Emblem on Header Panel	X	
Bright, Headlamp Bezels	X	X
'Chevrolet' Script on Left Side of Grille	X	X
Bright Grille Frame Moldings	X	X
Bright Fender and Hood Moldings	X	X
SIDE		
Fender Mounted Front Markers	X	X
Rear Quarter Marker Lamps	X	X
Rectangular 5" Outside L.H. and R.H. Rear View Mirror	X	X
Bright Rocker Panel Moldings	X	
Painted Roof Drip Moldings	X	
Bright Roof Drip Moldings	O	X
Wheel Trim Covers	O	X
Hub Caps	X	
Bright Flush Door Handle	X	X
Bright Door Upper Frame Moldings	X	X
Wheel Opening Moldings	O	X
Bright Rear Painted Quarter Window Reveal Molding	X	X
Body Side Wood-Grain Applique and Limed Oak Border Moldings		O
Rear Quarter Series Nameplate	X	X
Colored PVC Body Side Molding with Bright Mylar Border	O	O
Bright Two-Tone Paint Molding	O	O
Bright Door Belt Molding	X	X
Sail Panel Emblem		X
REAR		
Tailgate Nameplate—"Chevrolet"	X	X
Tailgate Wood-Grain Applique with Limed Oak Border Molding		O
Bright Tailgate Opening Molding		X
Bright Tailgate Belt and Weatherstrip Moldings	X	X
Bright Trimmed Single Tail, Stop and Back-Up Lamps	X	X
Bright Tailgate Handle	X	X
Bright Electric Tailgate Window Control	X	X
Tailgate Molding - Black PVC with Bright Mylar Insert	X	
Tailgate Molding - Argent PVC with Bright Mylar Border	O	
Tailgate Emblem - Bow Tie	X	
Tailgate Emblem - Caprice Crest		X
Tailgate Lower Molding		X

O - Optional Usage

INTERIOR EQUIPMENT

STANDARD INTERIOR EQUIPMENT SEDANS AND COUPES

<u>INSTRUMENT PANELS AND STEERING WHEELS</u>	Impala	Caprice Classic
Glove Compartment Light	X	X
Cigarette Lighter	X	X
Clock, Electric	O	X
Clock Hole Cover	X	
Instrument Panel Knobs Bright with Rosewood Insert	X	X
Instrument Panel Pad—Upper	X	X
Instrument Panel Upper Trim Plate with Series Nameplate	X (a)	X (b)
Instrument Cluster Bright and Rosewood Trim	X	X
Ash Tray — Illuminated	O	X
Ash Tray Face Plate—Painted	X	X
Windshield Wiper and Washer, Two Speed—Illuminated Control	X	X
Upper Ventilation Outlets and Controls—Black	X	X
Instrument Panel Courtesy Lights	O	X
Turn Signal and Shift Lever Knobs—Color Keyed	X	X
Steering Column Ignition Lock	X	X
Steering Wheel, Soft Vinyl Shroud and Rim — Shroud Insert and Chevrolet Nameplate Rosewood Insert	X	X (c)
Color-Keyed Steering Wheel, Shroud, and Column	X	X
Instrument Panel Rosewood Grain Trim and Bright (Upper Area)	X (d)	X (d)
Dual Horns	O	X
Single Horn	X	
Audio and Visual Lap Belt Warning System	X	X
Radio and Heater Control Trim Plate	X (e)	X (e)
 <u>GLASS</u>		
Windshield, Laminated Safety Plate Glass	X	X
Backlight Safety Solid Plate Glass	X	X
Side Windows, Safety Solid Plate Glass	X	X

O Optional usage

- (a) Bright, Impala script on instrument panel (no trim plate)
- (b) Bright, Caprice Classic name on black hi-gloss trim plate
- (c) Wheel rim has woodgrain insert
- (d) Switch and glove box area (Rosewood and bright, Caprice) (cross grain texture & bright, Impala)
- (e) Rosewood on Caprice and cross grain texture on Impala in colors.

NOTE: Rosewood is Hi-Gloss.

INTERIOR EQUIPMENT

STANDARD INTERIOR EQUIPMENT STATION WAGONS

INSTRUMENT PANEL AND STEERING WHEELS	Impala	Caprice Estate
Glove Compartment Light	X	X
Cigarette Lighter	X	X
Clock, Electric	O	X
Clock Hole Cover	X	
Instrument Panel Knobs Bright with Rosewood Insert	X	X
Instrument Cluster Bright and Rosewood Trim	X	X
Tailgate Window Switch	X	X
Instrument Panel Pad—Upper	X	X
Instrument Panel Upper Trim Plate with Series Nameplate	X (a)	X (b)
Ash Tray — Illuminated	O	X
Ash Tray Face Plate—Painted	X	X
Windshield Wiper and Washer, Two Speed—Illuminated Control	X	X
Upper Ventilation Outlets and Controls—Black	X	X
Instrument Panel Courtesy Lights	O	X
Turn Signal and Shift Lever Knobs—Color Keyed	X	X
Steering Column Ignition Lock	X	X
Steering Wheel, Soft Vinyl Shroud and Rim—Shroud Insert and Chevrolet Nameplate (has Rosewood Insert)	X	X (c)
Color-Keyed Steering Wheel, Shroud and Column	X	X
Instrument Panel Rosewood Grain Trim and Bright (Upper Area)	X (d)	X (d)
Dual Horns	O	X
Single Horn	X	
Audio and Visual Lap Belt Warning System	X	X
Radio and Heater Control Trim Plate	X (e)	X (e)
GLASS		
Windshield Laminated Safety Plate Glass	X	X
Backlight, Safety Solid Plate Glass	X	X
Side Windows, Safety Solid Plate Glass	X	X

O Optional Usage

(a) Bright, Impala script on instrument panel (no trim plate)

(b) Bright, "Caprice Classic" name on black high-gloss trim plate

(c) Wheel rim has woodgrain insert

(d) Switch and glove box area (Rosewood and bright, Caprice) (cross grain texture and bright, Impala) in colors.

(e) Rosewood on Caprice and cross grain texture on Impala in colors

NOTE: Rosewood is High Gloss

INTERIOR EQUIPMENT

ROOF AND PILLARS	Impala			Caprice Classic		
	69	47	35	69	47	35
Headlining Cloth	X	X	X	X	X	X
Rear View Mirror, 12" Prismatic-Textured Black Vinyl Clad (F)	X	X	X	X	X	X
Rear View Mirror Support, Bonded to W/S, Black Painted (F)	X	X	X	X	X	X
Sunshade, Padded, Non-Hook Cloth (F)	X	X	X	X	X	X
Roof Side Rail Garnish Moldings-Painted Metal (F)	X	X	X	X	X	X
Rear Window Moldings-Painted Metal and Plastic (F)		X			X	
Rear Window Upper and Side Moldings-Plastic Painted Metal (F)	X			X		
Quarter Window Garnish Moldings-Painted Metal (F)			X			X
Windshield Garnish Moldings-Plastic (F)	X	X	X	X	X	X
Center Pillar Lower Finish Panel, Molded Plastic (F)	X		X	X		X
Center Pillar Upper Molding-Molded Plastic (F)	X		X	X		X
Rear Quarter Upper Trim Panel, Molded Plastic (F)		X			X	
Coat Hooks, Plastic-Trim Color (F)	X	X	X	X	X	X
Center Dome Light-Plastic Lens (F)	X	X	X	X	X	X
Front Door Jamb Switch, Key Reminder and Dome Lamp, L.H. Pillar (F)	X	X	X	X	X	X
Front Door Jamb Switch for Dome Lamp R.H. Pillar (F)	X	X	X	X	X	X
Rear Door Jamb Switches for Dome Lamp (F)				X		X

SEATS AND FLOOR COVERING

Front and Rear Seat Cushion and Backrest, Full Molded Foam (F)	X	X	X	X	X	X
Single Loop Seat Belt System uses Retractor, Located in Center Pillar on Sedans and Wagons and in Quarter Panel on Coupes for Both Seat and Shoulder Belt	X	X	X	X	X	X
Black Rear Seat Lap Belts (3 Sets) Locking Outer Retractors (F)	X	X	X	X	X	X
Front Seat Center Lap Belt, Black (F)	X	X	X	X	X	X
Front Seat Head Restraints (F)	X	X	X	X	X	X
Front Seat Center Armrest (F)				X		
Front Seat Bright Back-Side Trim Panels (F)				X	X	X
Package Shelf Embossed Board (F)	X			X		
Package Shelf Woven Fiber Board		X			X	
Folding Front Seat Back Locks-Bright (F)		X			X	
Carpet, Floor Covering - Nylon Cut Pile (F)	X	X	X	X	X	X

(F) Fisher Body Released

INTERIOR EQUIPMENT

DOOR AND QUARTER PANEL (F)	Impala			Caprice Classic		
	69	47	35	69	47	35
Plastic Armrest with pad	X	X	X	X	X	X
Plastic Armrest with Pad and Ash Tray	X		X	X		X
Soft Trim Door Panel	X	X	X	X	X	X
Pull Type Door Handle	X	X	X	X	X	X
Rear Quarter Panel with Armrest and Ash Tray		X			X	
Window Control Handle Knobs, Clear Plastic	X	X	X	X	X	X
Door Lock Buttons—Bright	X	X	X	X	X	X
Door Trim Panel Carpet — Cut Pile plus Opt.				X	X	
Rosewood Wood-Grain Door Panel Plaques, Bright Trim	X	X	X			
Cloth Insert				X	X	
Front and Rear Door Locks 2-Position Free Wheeling	X	X	X	X	X	X
Front Door Pull Strap and Rear				X	X	X
Rear Quarter Sidewalls—Molded Plastic			X			X

LUGGAGE AREA AND MISC.

Luggage Compartment Light (C)	X	X		X	X	
Luggage Compartment Spatter Paint (F)	X	X		X	X	
Luggage Compartment Mat—Vinyl on Foam (F)	X	X		X	X	
Load Floor—Textured Metal (F)			X			X
Storage Compartment Mat—Vinyl on Foam (F)			X			
Storage Compartment Lining—Vinyl on Foam (F)			O			X

(F) Fisher Body Released
 (C) Chevrolet Released
 O Optional usage

EXTRA COST EQUIPMENT

EQUIPMENT	RPO	ACC.
Air conditioning, Four-Season (See page 13 for content)	C60	
Air conditioning, Comfortron: automatic temperature control (See page 13)	C61	
Battery, heavy duty	UA1	
Belts, seat and shoulder: in addition to or replacing standard belts.		
Deluxe belts: (Replacing standard number of belts)		
Coupe and Sedan - 6 seat and 2 shoulder	AK1	
Shoulder belts - 2 rear:		
For use when custom deluxe belts are ordered (Color keyed to interior)		
Body insulation package ("Silent Sound Group") base on 1BN00	BS1	
Carpet, Station Wagon load floor (Color-Keyed)	B39	
Cap, locking gas filler		ACC
Clock, electric (Standard on Caprice Classic)	U35	ACC
Compass		ACC
Cover, luggage carrier - wagon		ACC
Dispenser, tissue tunnel mount		ACC
Dome reading lamp	C95	
Door edge guards	B93	ACC
Electric trunk release - except wagon	A90	ACC
Floor mats color-keyed - 2 front, 2 rear	B37	ACC
Front and rear bumper guards	V30	ACC
Generator: 61-amp Delcotron	K76	
Glass, Soft-Ray tinted: all windows (Includes w/s radio antenna)	A01	
Glass, windshield - tinted (Fleet and Canadian - includes radio antenna)	A02	
Harness, trailer wiring		ACC
Heater, engine block (Canada)	K05	
Hitch, trailer		ACC
Hitch, trailer, equalizing type		ACC
Horns, dual - base on 1BN00	U05	ACC
Interior car warmer		ACC
Lamp, portable spot		ACC
Lighting, auxiliary:	ZJ9	
Courtesy lights - (Standard on 1BN00 models)		
Luggage compartment light - Std. Impala and Caprice Classic sedans and coupes		ACC
Ash tray light - (Standard on 1BN00 models)		
Underhood light		ACC
Rear dome lamp - wagons		
Headlamp reminder buzzer part of ZJ9 package		ACC
● Dome reading lamp		
Litter container (RH cowl kick panel)	D24	
Litter container and tissue dispenser		ACC
Litter container, underseat unit		ACC
Lock, rear door safety		ACC
Luggage compartment trim deluxe (Except wagon)	B48	
Mat, front floor full width - vinyl		ACC
Mat, load floor-wagon		ACC
Mirrors, fender, for trailering (RH & LH)		ACC
Mirror, rear view L.H. outside remote-control	D33	
Mirror, rear view R.H. outside remote-control (Requires D33)	DF3	
Mirror, RH (to match LH remote or standard unit - standard on Station Wagons)		ACC
Mirrors, Dual Sport - RH and LH remote control type (Painted body color)	D68	
Molding, adhesive backed vinyl (roll or cut to length)		ACC
Moldings, body side - vinyl insert	B84	
Molding, wheel opening	B96	

EXTRA COST EQUIPMENT

<u>EQUIPMENT</u>	<u>RPO</u>	<u>ACC.</u>
Radiator, heavy duty	V01	
Radio equipment: Radios, pushbutton - includes concealed w/s antenna		
AM Radio	U63	ACC
AM/FM Radio	U69	ACC
AM/FM/Stereophonic Radio	U58	ACC
Citizens Band Radio - Six channel plus antenna		ACC
Stereo Tape System with AM Stereophonic Radio	UM1	ACC
Stereo Tape System with AM/FM/Stereophonic Radio	UM2	ACC
Mast antenna, RH front fender		ACC
Speaker, rear seat (Requires U63 or U69)	U80	ACC
Windshield antenna	U76	
Rear window defogger (Forced air) (All except wagons)	C50	ACC
Roof cover, vinyl (Padded vinyl) (All except wagons)	C09	
Roof luggage carrier - wagon	V55	ACC
Seat, infant safety		ACC
Seat, child safety		ACC
Seat, 50-50 front bench	AV7	
Shock absorbers, rear:		
Superlift	G66	
Speed control: (Cruise-Master)	K30	ACC
Steering wheel, comfortilt	N33	
Strips - impact - FR. and RR. bumper	VE5	
Suspension, heavy duty front and rear	F40	
Sport suspension (All except wagons)	F41	
Theft alarm audio		ACC
Custom two-tone paint (Includes stripe and door handle tape)	D84	
Two-Tone finish: includes bright metal outline moldings	D99	
Visor vanity mirror, R.H. visor	D34	ACC
Wheel covers, full: (All except 1BN00 models)	P01	ACC
Wheel covers, deluxe (New ABS plastic)	PB2	
Wipers, windshield - pulse type	CD4	
<u>FACTORY-INSTALLED REGULAR PRODUCTION TIRES</u>		
FR78 x 15B - Steel belted radial ply Whitewall (Exc. Station Wagons)	QBW	
GR78 x 15B - Steel belted radial ply Blackwall (Exc. Station Wagons)	QCF	
GR70 x 15B - Steel belted radial ply Whitewall (With F41 suspension only)	QCX	
GR78 x 15B - Steel belted radial ply Whitewall (Exc. Station Wagons)	QDR	
HR78 x 15B - Steel belted radial ply Blackwall (Station Wagon)	QDU	
HR78 x 15B - Steel belted radial ply White Stripe (Station Wagon)	QEL	

EXTRA COST EQUIPMENT

<u>POWER TEAMS.</u>	<u>RPO</u>	<u>ACC.</u>
305 cu. in. V-8 (Sedans and Coupes) (Base on all wagons)	LG3	
350 cu. in. V-8 (Sedans, Coupes and Wagons)	LM1	
Turbo Hydra-matic (All engines)	M40	
Axle, positraction	G80	
Axle, high altitude ratio	G92	
 <u>POWER ASSISTS</u>		
Door lock system, power	AU3	
Seat, power: 6-way front bench seat	A42	
Seat (LH) - Power: 6-way front bench seat 50-50	AG7	
Tailgate, power - wagon	C26	
Windows, power	AU6	
Trunk opener (Sedans and Coupes)	A90	

COMFORTRON AUTOMATIC TEMPERATURE CONTROL (RPO C61)

Integral air cooling and heater system. Used only with RPO C60 system. Automatically controlled by pre-setting on instrument control panel. Control assembly consists of horizontal lever and vertical temperature wheel. In-car sensor located on instrument panel; ambient sensor located beneath air intake cowl.

FOUR SEASON (RPO C60)

Integral air cooling and heater system. Manually controlled by two horizontal levers on instrument control panel plus 4-speed fan switch. Upper lever (mode selector control) uses vacuum supply and electrical switches to operate mode doors and compressor. Lower lever uses bowden cable to operate temperature door. Six air outlets: 2 center, 2 side, 2 lower.

BASIC COMPONENTS

Control panel, evaporator, blower, condenser, receiver-dehydrator, refrigerant (freon) tank, air intake assembly and duct assembly for both systems. Comfortron also includes sensors, transducer and power servo unit for automatic operation.

EQUIPMENT (Used in addition to or in place of base equipment)

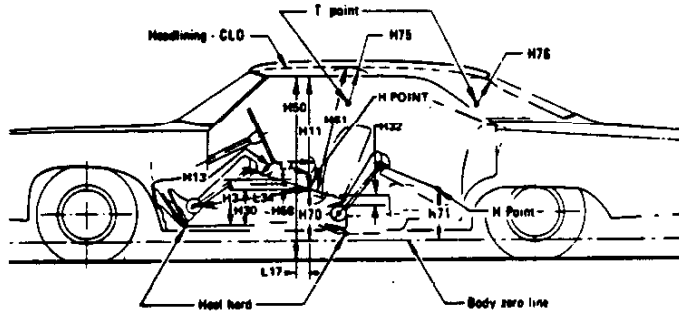
POWER TRAINS

Fan Blade	7 blade
Fan Clutch	Thermomodulated fluid coupling
Crankshaft Pulley	Single three groove pulley
Water Pump & Fan Pulley	Single
Compressor & Crankshaft Belt	One
Generator	61 Ampere
Radiator	Heavy duty

DIMENSIONS AND WEIGHTS

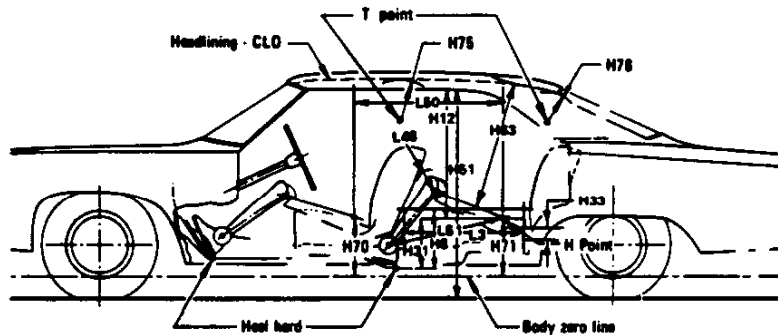
INTERIOR DIMENSIONS	2
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INTERIOR DIMENSIONS



FRONT COMPARTMENT

CODE	DESCRIPTION	SEDANS	COUPES	STATION WAGONS
H-3	Seat cushion height		275 (10.8 in.)	
H11	Entrance height	781 (30.7 in.)	767 (30.2 in.)	781 (30.7 in.)
H13	Steering wheel thigh clearance		100 (3.9 in.)	
H30	H point to heel point		223 (8.8 in.)	
H32	Seat cushion deflection		81 (3.1 in.)	
H50	Upper body opening to ground	1285 (50.6 in.)		1307 (51.5 in.)
H58	H point rise		23 (0.9 in.)	
H61	Effective headroom	992 (39.0 in.)	975 (38.4 in.)	997 (39.2 in.)
H70	H point to body O line		206 (8.1 in.)	
H75	Effective "T" point headroom	997 (39.2 in.)	981 (38.6 in.)	1001 (39.4 in.)
W3	Shoulder room		1544 (60.8 in.)	
W5	Hip room		1396 (54.9 in.)	
L7	Steering wheel torso clearance		335 (13.2 in.)	
L17	H point travel		162 (6.4 in.)	
L34	Effective leg room		1072 (42.2 in.)	



REAR COMPARTMENT

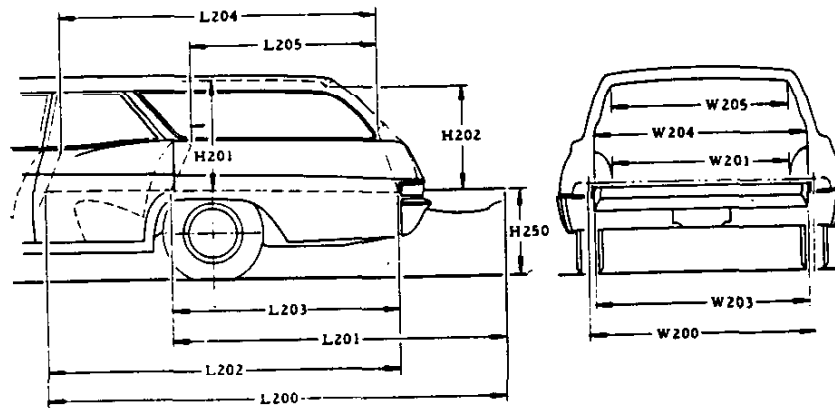
H8	Seat cushion height	363 (14.3 in.)	342 (13.5 in.)	359 (14.1 in.)
H12	Entrance height	785 (30.9 in.)	--	775 (30.5 in.)
H31	H point to heel point	292 (11.5 in.)	273 (10.7 in.)	307 (12.1 in.)
H33	Seat cushion deflection	102 (4.0 in.)	113 (4.4 in.)	105 (4.1 in.)
H51	Upper body opening to ground	1300 (51.2 in.)	--	1315 (51.8 in.)
H63	Effective headroom	970 (38.2 in.)	966 (38.0 in.)	1000 (39.4 in.)
H71	H point to body O line	198 (7.8 in.)	179 (7.0 in.)	213 (8.4 in.)
H76	Effective "T" point headroom	967 (38.1 in.)	962 (37.9 in.)	1004 (39.5 in.)
W4	Shoulder room	1545 (60.8 in.)	1494 (58.8 in.)	1546 (60.9 in.)
W6	Hip room	1405 (55.3 in.)	1462 (57.6 in.)	1398 (55.0 in.)
L3	Rear compartment room	743 (29.3 in.)	742 (29.2 in.)	728 (28.7 in.)
L50	H point couple distance	885 (34.8 in.)	854 (33.6 in.)	847 (33.3 in.)
L51	Effective leg room	1003 (39.5 in.)	957 (37.7 in.)	970 (38.2 in.)

LUGGAGE COMPARTMENT

H195	Liftover height	796 (31.3 in.)		--
VI	Usable luggage capacity (cu.ft.)	572 $\frac{1}{2}$ (20.2 ft. ³)	560 $\frac{1}{2}$ (19.8 ft. ³)	--

*Primary Dimensions are millimetres unless otherwise shown.

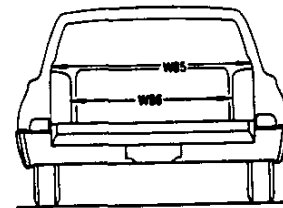
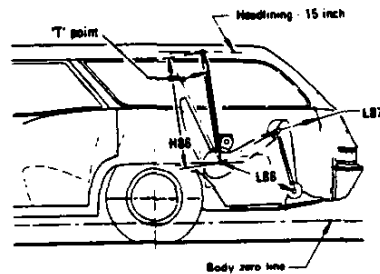
INTERIOR DIMENSIONS



STATION WAGON CARGO SPACE

CODE	DESCRIPTION	1BL35		1BN35	
		763 (30.0 in.)		757 (29.8 in.)	
H201	Maximum cargo height			729 (28.7 in.)	
H202	Rear opening height			741 (29.2 in.)	
H250	Tailgate to ground height			1548 (60.9 in.)	
W200	Cargo width-front			1224 (48.2 in.)	
W201	Cargo width-wheelhouse			1238 (48.7 in.)	
W203	Rear opening width at floor			988 (38.9 in.)	
W204	Rear opening width at belt			2795 (110.0 in.)	
W205	Rear opening width above belt			1907 (75.1 in.)	
L200	Maximum cargo length-front seat			2295 (90.3 in.)	
L201	Maximum cargo length-second seat			1407 (55.4 in.)	
L202	Cargo length at floor-front seat			2106 (82.9 in.)	
L203	Cargo length at floor-second seat			1222 (48.1 in.)	
L204	Cargo length at belt-front seat				
L205	Cargo length at belt-second seat				
V2	Total cargo index volume (cu.ft.)	2484 \mathcal{L} (87.7 cu.ft.)		2465 \mathcal{L} (87.0 cu.ft.)	

Volume underfloor storage compartment
 2-Seat Wagons 226.71 \mathcal{L} (8.0 Cu.Ft.)
 3-Seat Wagons 127.53 \mathcal{L} (4.5 Cu.Ft.)

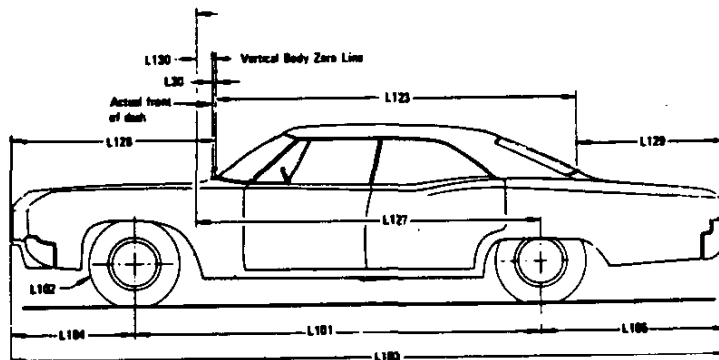


STATION WAGON THIRD SEAT

W85	Shoulder room	1240 (48.8 in.)	
W86	Hip room	1109 (43.7 in.)	
H86	Effective headroom	952 (37.5 in.)	946 (37.2 in.)
L86	Effective leg room	782 (30.8 in.)	
L87	Knee room	317 (12.5 in.)	

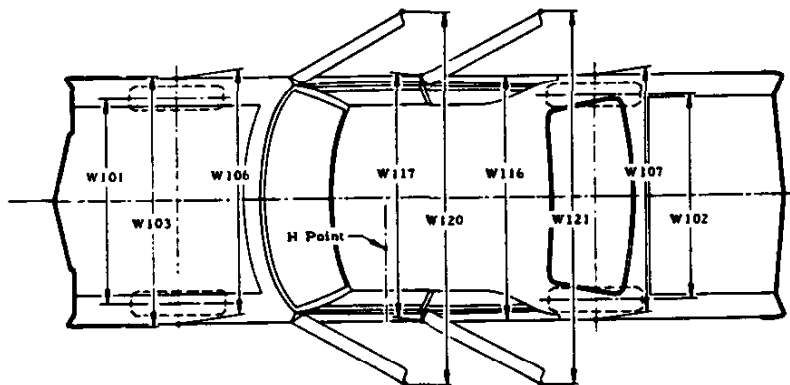
*Primary Dimensions are millimetres unless otherwise shown.

EXTERIOR DIMENSIONS



LENGTHS

CODE	DESCRIPTION	SEDANS	COUPES	STATION WAGONS
L101	Wheelbase		2945 (116 in.)	
L102	Tire size (standard)		FR78-15B	HR78-15B
L103	Overall length	5385 (212.1 in.)		5454 (214.7 in.)
L104	Overhang, front		1016 (40.0 in.)	
L105	Overhang, rear	1424 (56.1 in.)		1493 (58.8 in.)
-	Overall length - less bumpers	5162 (203.2 in.)		5213 (205.2 in.)
L123	Body upper structure length at car center line	2530 (99.6 in.)	2652 (104.4 in.)	3506 (138.0 in.)
L127	Body O line to C/L of rear wheels		2475 (97.5 in.)	
L126	Front end length at center line	1BN00 Models 1627 (64.0 in.), 1BL00 Models 1623 (63.9 in.)		
L129	Rear end length at center line	1021 (40.2 in.)	898 (35.3 in.)	100 (3.9 in.)
L125	Body zero plane to windshield cowl point	235 (9.2 in.)	236 (9.3 in.)	235 (9.2 in.)
L30	Body O line to actual front of dash		- 34 (- 1.3 in.)	

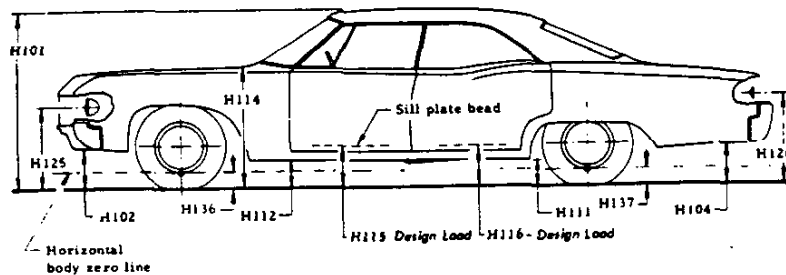


WIDTHS

CODE	DESCRIPTION	SEDANS	COUPES	STATION WAGONS
W101	Tread - front	1568 (61.8 in.)		1578 (62.2 in.)
W102	Tread - rear	1542 (60.8 in.)		1628 (64.1 in.)
W103	Maximum overall width of car	1930 (76.0 in.)		2010 (79.1 in.)
W106	Front fender overall width	1930 (76.0 in.)		2010 (79.1 in.)
W107	Rear fender overall width	1930 (76.0 in.)		2010 (79.1 in.)
W116	Maximum overall width of body	1930 (76.0 in.)		2010 (79.1 in.)
W117	Maximum body width at number 2 pillar	1916 (75.4 in.)		1916 (75.4 in.)
W120	Overall car width, front doors open	3442 (135.5 in.)	4101 (161.5 in.)	3442 (135.5 in.)
W121	Overall car width, rear doors open	2917 (114.9 in.)		2915 (114.8 in.)

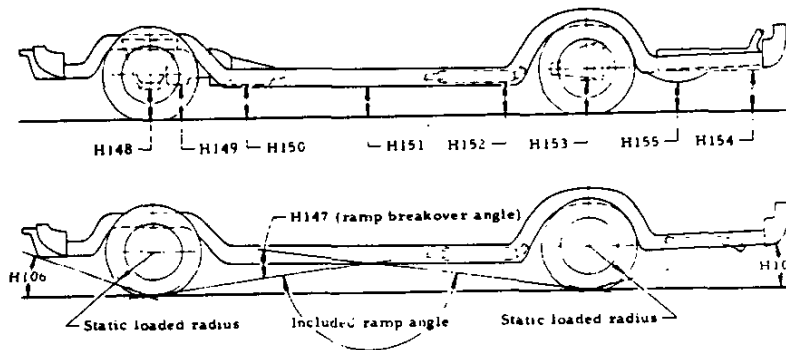
*Primary Dimensions are millimetres unless otherwise shown.

EXTERIOR DIMENSIONS



HEIGHTS

CODE	DESCRIPTION	SEDANS	COUPES	STATION WAGONS
H101	Overall height (design)	1422 (56.0 in.)	1406 (55.3 in.)	1473 (58.0 in.)
H102	Front bumper to ground	282 (11.1 in.)		
H104	Rear bumper to ground	333 (13.1 in.)		
H111	Rocker panel to ground - rear	229 (9.0 in.)		
H112	Rocker panel to ground - front	229 (9.0 in.)		
H114	Hood at rear to ground	996 (39.2 in.)		
H115	Step height - front (design)	367 (14.4 in.)	357 (14.1 in.)	365 (14.4 in.)
H116	Step height - rear (design)	368 (14.5 in.)	359 (14.1 in.)	368 (14.5 in.)
H125	Headlamp to ground	687 (27.0 in.)		
H126	Tail lamp to ground	685 (27.0 in.)		
H136	Body O line to ground - front	- 198		
H137	Body O line to ground - rear	- 181		



CLEARANCES

H106	Angle of approach (degrees)	16.97		16.79
H107	Angle of departure (degrees)	15.17		12.24
H147	Ramp breakover angle (degrees)	15.31		15.09
H148	Front suspension to ground	147 (5.8 in.)		150 (5.9 in.)
H149	Oil pan to ground	173 (6.8 in.)		172 (6.7 in.)
H150	Flywheel housing to ground	181 (7.1 in.)		171 (6.6 in.)
H151	Frame to ground	179 (7.0 in.)		187 (7.4 in.)
H152	Exhaust system to ground	175 (6.9 in.)		187 (7.4 in.)
H153	Rear axle to ground	178 (7.0 in.)	177 (7.0 in.)	191 (7.5 in.)
H154	Fuel tank to ground	249 (9.8 in.)		204 (8.0 in.)
H155	Tire well to ground	--		
H156	Minimum ground clearance	147 (5.8 in.) (a)		150 (5.9 in.) (a)

(a) Front suspension to ground.

*Primary Dimensions are millimetres unless otherwise shown.

VEHICLE WEIGHTS

MODEL TYPE			SHIPPING WEIGHT			CURB WEIGHT		
MODEL DESIGNATION	BASE ENGINE	VEHICLE TYPE	Front	Rear	Total	Front	Rear	Total
1BL47	250 Cu.In. L6 (L22)	2-Door Sport Coupe	917 kg. (2021-lb.)	686 kg. (1512-lb.)	1603 kg. (3533-lb.)	908 kg. (2001-lb.)	745 kg. (1642-lb.)	1653 kg. (3643-lb.)
1BL69	250 Cu.In. L6 (L22)	4-Door Sedan	896 kg. (1975-lb.)	721 kg. (1589-lb.)	1617 kg. (3564-lb.)	887 kg. (1955-lb.)	780 kg. (1720-lb.)	1667 kg. (3675-lb.)
1BL35	305 Cu.In. V8 (LG3)	4-Door Station Wgn.	926 kg. (2041-lb.)	908 kg. (2001-lb.)	1834 kg. (4042-lb.)	914 kg. (2014-lb.)	973 kg. (2144-lb.)	1887 kg. (4158-lb.)
1BN47	250 Cu.In. L6 (L22)	2-Door Sport Coupe	926 kg. (2042-lb.)	693 kg. (1529-lb.)	1619 kg. (3571-lb.)	917 kg. (2022-lb.)	752 kg. (1659-lb.)	1669 kg. (3681-lb.)
1BN69	250 Cu.In. L6 (L22)	4-Door Sedan	906 kg. (1997-lb.)	730 kg. (1609-lb.)	1636 kg. (3606-lb.)	897 kg. (1977-lb.)	789 kg. (1739-lb.)	1686 kg. (3716-lb.)
1BN35	305 Cu.In. V8 (LG3)	4-Door Station Wgn.	930 kg. (2051-lb.)	924 kg. (2037-lb.)	1854 kg. (4088-lb.)	918 kg. (2024-lb.)	989 kg. (2180-lb.)	1907 kg. (4204-lb.)

SHIPPING WEIGHT: Weight of basic vehicle with regular equipment, including grease, oil and (3) gallons of gasoline, and engine coolant to capacity.

CURB WEIGHT: Shipping weight plus gasoline to capacity.

VEHICLE WEIGHTS

OPTIONAL EQUIPMENT

RPO	OPTION	WITH	WEIGHT
			METRIC (kg) – ENGLISH
AU3	Electric Door Locks	2-Door Models	1.36 (3 lb.)
		4-Door Models	2.26 (5 lb.)
A31	Power Windows	2-Door Models 1BL, 1BN47	2.26 (5 lb.)
		4-Door Models 1BL, 1BN35, 69	6.35 (14 lb.)
A42	Power Seat		8.17 (18 lb.)
B37	Front and Rear Floor Mats		3.17 (7 lb.)
C09	Vinyl Roof Cover (Padded Vinyl)	All except Station Wagons	2.72 (6 lb.)
C60	Air Conditioning 4-Season	With L6 Engine	32.20 (71 lb.)
		With V8 Engine	33.57 (74 lb.)
C61	Air Conditioning Comfortron	With L6 Engine	34.93 (77 lb.)
		With V8 Engine	35.38 (78 lb.)
PA2	Wheel Trim Covers	1BL00 Models	1.36 (3 lb.)
UA1	Heavy Duty Battery	With L6 Engine	4.08 (9 lb.)
		With V8 Engine	1.82 (4 lb.)
U63	Radio AM Pushbutton		2.72 (6 lb.)
U69	Radio AM/FM Pushbutton		3.18 (7 lb.)
U58	Radio AM/FM Stereo		5.90 (13 lb.)
UM1	Radio AM Pushbutton and Tape		6.35 (14 lb.)
UM2	Radio AM/FM Pushbutton and Tape		7.25 (16 lb.)
VE5	Bumper Impact Strip, PVS front and rear		1.82 (4 lb.)
V30	Bumper Guards Front and Rear	All except Station Wagons	4.08 (9 lb.)
		Station Wagons	4.08 (9 lb.)
V55	Roof Luggage Carrier	Station Wagons	10.43 (23 lb.)
LG3	305 Cu. In. V8 Engine	Sedans & Coupes	43.55 (96 lb.)
LM1	350 Cu. In. V8 Engine	Sedans & Coupes	53.07 (117 lb.)
		Station Wagons	16.33 (36 lb.)

*Primary Dimensions are kilograms.



BODY

EXTERIOR PAINT PROCESS	2
EXTERIOR-INTERIOR COLORS	3, 4, 5, 6
BODY CONSTRUCTION AND GLASS AREA	7

EXTERIOR PAINT PROCESS

1. **RUSTPROOFING.** Assembled car bodies are chemically sprayed to clean and etch the metal surfaces for corrosion resistance and paint adhesion. Unassembled sheet metal parts follow the same process.
2. **BODY AND SHEET METAL PRIMERS.** Four corrosion resistant primers, specially formulated, are hand sprayed on the body in areas where rust might develop. Lower areas considered especially vulnerable are coated with another rust inhibiting compound.
3. **PRIMER COAT** is applied to all outside and inside surfaces of front fenders and hoods. The parts are mechanically dipped or flow-coated to insure coating in all seams and secluded areas, and baked at 390 degrees F. for 30 minutes. A coat of sealer is then applied by hand spray to all surfaces requiring another coat of lacquer.
4. **FLASH PRIMER AND PRIMER-SURFACER COATS.** An air-dry flash primer coat is hand sprayed on surfaces below the body belt line. Then a gray primer-surfacer coat is hand sprayed on all outside surfaces of the body and oven baked for 45 minutes at 285 degrees F.
5. **INITIAL SANDING.** Power wet sanding, followed by hand sanding, is done on all body surfaces requiring lacquering. This insures a smooth surface for the lacquer finish. To remove the water, the body is wiped and run through an infra-red oven.
6. **LACQUERING.** Three coats of acrylic lacquer are spread on the exterior surfaces of the body and sheet metal parts to build up a finish of the required thickness for each color.
7. **INITIAL BAKING.** To harden the paint for final sanding, the body and sheet metal parts are baked for approximately 10 minutes at 200 degrees F.
8. **FINAL SANDING.** To remove body surface defects, power and hand sanding is done with fine grit sandpaper and mineral spirits as a wetting agent. Sanded areas are wiped to insure a clean surface before final baking.
9. **FINAL BAKING.** To assure a durable, hard, high luster finish the lacquer is baked for 30 minutes at 275 degrees F. Reheating the lacquer after final sanding permits paint film to soften, allowing surface blemishes and sanding scratches to disappear during the thermo-reflow process.
10. **UNDERCOATING.** To block out road noise, an asbestos fiber sound deadener with asphalt base is sprayed inside the wheel housings and on the bottom of the underbody at designated areas.
11. **PAINT REPAIR AND PROTECTION.** Mars, nicks, or scratches that occur during final assembly are corrected at the factory before shipment. When required, light "slush" polishing brings painted surfaces to a high luster finish. Wax is applied to all horizontal surfaces of each vehicle and polished out for protection during shipment. The wax contains no silicones, thus eliminating any paint contamination problem.

EXTERIOR-INTERIOR COLORS

EXTERIOR COLOR – VINYL ROOF COMBINATIONS

VINYL TOP COVER	EXTERIOR COLOR AVAILABILITY
Silver Metallic	White 11
	Silver Metallic 13
	Black 19
	Dark Blue Metallic 29
	Firethorn 36
	Medium Red 72
Black	All Available Colors, except 69
White	All Available Colors, except 13
Light Blue Metallic	White 11
	Light Blue Metallic 22
	Dark Blue Metallic 29
Light Buckskin	White 11
	Black 19
	Dark Blue-Green Metallic 48
	Firethorn 36
	Buckskin Metallic 63
	Brown Metallic 69
	Orange Metallic 78
	Green Medium (Met.) 44
	Red (Med.) 72
	Buckskin, Light 61
Medium Green Metallic	White 11
	Green Medium (Met.) 44
	Firethorn Dark Blue-Green (Met.) 48
Firethorn Metallic	White 11
	Firethorn 36

EXTERIOR-INTERIOR COLORS

1977 CHEVROLET 'B' INTERIOR-EXTERIOR COLOR COMBINATIONS

MODEL	Seat Type	INTERIOR TRIM					
		Black		Light Blue		Dark Green	
		Vinyl	Cloth	Vinyl	Cloth	Vinyl	Cloth
Impala - 1BL00							
Sedan (69)	(A52) Bench	19N	19B	24N	24B	44N	
Sedan (69)	(AV7) 50-50	19N			24B		
Custom Coupe (47)	(A52) Bench	19N	19B	24N	24B	44N	
Custom Coupe (47)	(AV7) 50-50	19N			24B		
Station Wagon (35)	(A52) Bench	19N		24N			
Station Wagon (35)	(AV7) 50-50	19N					
Caprice Classic - 1BN00							
Sedan (69)	(A52) Bench		19D		24D		44D
Sedan (69)	(AV7) 50-50		19D		24D		
Sport Coupe (47)	(A52) Bench		19D		24D		44D
Sport Coupe (47)	(AV7) 50-50		19D		24D		
Station Wagon (35)	(A52) Bench	19V			24D		
Station Wagon (35)	(AV7) 50-50	19V			24D		
Caprice Luxury Interior - 1BN00							
Sedan (69)	(AV7) 50-50				24E		
Coupe (47)	(AV7) 50-50				24E		
EXTERIOR COLOR	Color Code						
White	11	R		R		R	
Silver Metallic	13	R		-		-	
Black	19	R		A		A	
Lt. Blue Metallic	22	R		R		-	
Dark Blue Metallic	29	A		R		-	
Firethorn Metallic	36	A		-		-	
Med. Green Metallic	44	A		-		R	
Dk. Blue Green Metallic	48	A		-		R	
Cream Gold	50	R		-		-	
Light Buckskin	61	R		-		-	
Buckskin Metallic	63	R		-		-	
Brown Metallic	69	-		-		-	
Red	72	A		-		-	
Orange Metallic	78	R		-		-	

Override RPO ZP2 will be provided to permit ordering of any interior-exterior color combination.

R - Recommended

A - Acceptable

CLOTH & VINYL USAGE

N - Wallaby vinyl

B - Windsor, 712 WC, knit cloth

C - Rutledge, 76 C/O 612 WC, woven sport cloth

V - Wallaby vinyl

D - Dover, C/O 605 WC, knit cloth

E - Lombardy 347 WC, velour cloth; Lombardy bolster

G - Rutledge, 76 C/O 612 WC, woven sport cloth

EXTERIOR INTERIOR COLORS

1977 CHEVROLET 'B' INTERIOR-EXTERIOR COLOR COMBINATIONS

MODEL	Seat Type	INTERIOR TRIM							
		Light Buckskin		Dark Firethorn		White			
		Vinyl	Cloth	Cloth	Vinyl	Vinyl /Black	Vinyl /D. Blue	Vinyl /Dk. Firethorn	Vinyl /Dk. Green
Impala - 1BL00									
Sedan (69)	(A52) Bench	64N	64B	71B	71N				
Sedan (69)	(AV7) 50-50	64N		71B					
Custom Coupe (47)	(A52) Bench	64N		71B	71N	11N	02N	07N	04N
Custom Coupe (47)	(AV7) 50-50	64N		71B		11N	02N	07N	04N
Station Wagon (35)	(A52) Bench	64N	64C	71C	71N				
Station Wagon (35)	(AV7) 50-50	64N	64C	71C					
Caprice Classic - 1BN00									
Sedan (69)	(A52) Bench	64V	64D	71D	71V				
Sedan (69)	(AV7) 50-50	64V	64D	71D	71V				
Sport Coupe (47)	(A52) Bench	64V		71D	71V	11V	02V	07V	04V
Sport Coupe (47)	(AV7) 50-50	64V		71D	71V	11V	02V	07V	04V
Station Wagon (35)	(A52) Bench	64V	64G		71B				
Station Wagon (35)	(AV7) 50-50	64V	64G		71V				
Caprice Luxury Interior - 1BN00									
Sedan (69)	(AV7) 50-50		64E	71E					
Coupe (47)	(AV7) 50-50		64E	71E					
EXTERIOR COLOR	Color Code	Light Buckskin		Dark Firethorn		White/Black	White/Dk. Blue	White/Dk. Firethorn	White/Dk. Green
White	11	R		R		R	R	R	R
Silver Metallic	13	-		R		R	-	-	-
Black	19	R		R		R	-	R	-
Lt. Blue Metallic	22	-		-		A	R	-	-
Dark Blue Metallic	29	-		-		A	R	-	-
Firethorn Metallic	36	R		R		A	-	R	-
Med. Green Metallic	44	A		-		A	-	-	R
Dk. Blue Green Metallic	48	R		-		A	-	-	R
Cream Gold	50	-		-		R	-	-	-
Light Buckskin	61	R		R		A	-	-	-
Buckskin Metallic	63	R		-		A	-	-	-
Brown Metallic	69	R		-		A	-	-	-
Red	72	R		R		A	-	R	-
Orange Metallic	78	R		-		R	-	-	-

R-Recommended
A-Acceptable

CLOTH & VINYL USAGE

N-Wallaby vinyl
B-Windsor, 712 WC, knit cloth
C-Rutledge, 76 C/O 612 WC, woven sport cloth
V-Wallaby vinyl
D-Dover, C/O 605 WC, knit cloth
E-Lombardy 347 WC, velour cloth; Lombardy bolster
G-Rutledge, 76 C/O 612 WC, woven sport cloth

NOTE: 11N/11V † - White vinyl interior with Black Instrument Panel, Carpet, Cowl Kick Panel, and Package Shelf.
02N/02V † - White vinyl interior with Dark Blue Instrument Panel, Carpet, Cowl Kick Panel, and Package Shelf.
04N/04V † - White vinyl interior with Dark Green Instrument Panel, Carpet, Cowl Kick Panel, and Package Shelf.
07N/07V † - White vinyl interior with Dark Firethorn Instrument Panel, Carpet, Cowl Kick Panel, and Package Shelf.

Override RPO ZP2 will be provided to permit ordering of any interior-exterior color combination.

EXTERIOR-INTERIOR COLORS

1977 CHEVROLET (1BA00)

REGULAR TWO-TONE-COLOR COMBINATION (RPO D99)

REGULAR TWO-TONE EXTERIOR COLORS				FISHER COLOR CUT-OFF MOLDINGS* 1BL-1BN47 & 69
LOWER		UPPER		
Dark Blue Green Met.	48L	Med. Green Met.	44U	Med. Green Met.
Dark Blue Met.	29L	Light Blue Met.	22U	Light Blue Met.
Brown Met.	69L	Light Buckskin	61U	Light Buckskin
Light Blue Met.	22L	White	11U	White
Orange Met.	78L	White	11U	White
Red	72L	White	11U	White
Med. Green Met.	44L	White	11U	White

* 1BL-1BN35 Color Cut-Off Moldings are Bright.

CUSTOM TWO-TONE COLOR COMBINATION (RPO D84) ** BODY SIDE MOLDING EQUIPMENT (RPO B84)

CUSTOM TWO-TONE EXTERIOR COLORS		BODY SIDE STRIPE COLOR (INCLUDED)	RPO B84 BODY SIDE MOLDING (IF APPLICABLE)	RPO C09 VINYL TOP COLORS (IF APPLICABLE)
BODY	ACCENT			
Light Blue Met. 22	Med. Blue Met. 85 WA 7001	Silver Met. WMH 4575	22Q Light Blue Met. WPV 4964	Lt. Blue Met. 22T
Light Buckskin 61	Buckskin Met. 63 WA 4997	Buckskin WMH 4718	61Q Light Buckskin WPV 4891	Lt. Buckskin 61T
Silver Met. 13	Med. Gray Met. 16 WA 4969	Black WMH 848	13Q Silver Met. WPV 4322	Silver Met. 13T

** These are the only combinations available – NO COLOR OVERRIDES ARE ALLOWED!

BODY CONSTRUCTION AND GLASS AREA

GENERAL

Type Unisteel, with cowl, roof, underbody and body panels welded to form body shell. Doors, front and rear lids are of double-panel construction and hinge assembled to body. Separate frame and bolt-on front end sheet metal, with protective inner fender skirts. Double panel roof construction with integral front and rear headers and side rails.

DOORS AND LOCKS

Door construction Double steel panels, with side guard beam. Doors hinged at front.
 Door handles Pull-type exterior. Free-wheeling inside door handles on all doors.
 Front door glass Full ventless windows on all models.

HOOD AND TRUNK LID

Type Counterbalanced, with spring loaded toggle action hinges on rear of hood and boxed hinges on trunk lid with torsion rod.
 Hood release Internal; to left of steering column under instrument panel.

VENTILATION

High level air intake for passenger compartment with double wall plenum chamber. Astro Ventilation with instrument panel outlets standard on all.
 Flow through ventilation Air enters cowl plenum thru concealed cowl high air intake and passes into the passenger compartment thru two upper level vents in the instrument panel and a lower vent below the panel. To assure constant flow, the heater blower moves air thru the lower vent whenever the ignition is on and the engine coolant is 95°F or higher. To exit, air passes under the rear seat cushion into the trunk, and rear quarters to baffle type outlets on door lock pillars.

SEAT CONSTRUCTION

Type
 All seat cushions and backrests Formed polyfoam

WINDSHIELD WIPERS AND WASHERS

Type Concealed dual 2-speed electric with 18" blades
 Linkage Parallel acting with articulated left arm.

HEADLIGHTS Dual, rectangular lamps all models

SPARE TIRE AND TOOLS

Location Sedans and Sport Coupes, angled on center of shelf in trunk compartment; Station wagon, vertically in right hand side of cargo compartment rear of wheelhouse behind removable cover. Tools consist of bumper jack with combination lever handle and wheel nut wrench mounted on diagonal brace in R.H. wheelhouse.

STATION WAGON REAR WINDOW & TAILGATE

Operation Three way tailgate design with exterior handle. Power tailgate glass standard. Can be used as a door with glass up. When used as a gate, glass must first be lowered.
 Stowage compartment A new lockable stowage compartment, located in the rearmost part of the left quarter panel, is base equipment for all station wagon models. This is made possible by the relocation of the fuel tank to a position underneath the underbody.

BODY GLASS VISIBILITY AREA

	MODELS		
	69	47	35
Windshield	8619 (1336.3 in.)		
Front Door Window	5705 (884.5 in.)	8759 (1358.0 in.)	5705 (884.5 in.)
Rear Door Window	6293 (975.7 in.)	--	5531 (857.5 in.)
Rear Quarter Window	--	2126 (329.6 in.)	8712 (1350.7 in.)
Rear Window	7525 (1166.7 in.)	7564 (1172.7 in.)	4661 (722.6 in.)
Total Area (Sq. In.)	28142 (4363.2 in.)	27068 (4196.6 in.)	33228 (5151.6 in.)

All window glass curved safety solid plate except curved laminated safety windshield.
 * Primary dimensions are square centimetres.



CHASSIS

FRAME AND FRONT SUSPENSION	2, 3
STEERING, DRIVELINE, WHEELS AND TIRES	4
REAR AXLE AND SUSPENSION	5, 6
BRAKES	7
BULBS AND LAMPS	8
FUSES AND CIRCUIT BREAKERS	9

FRAME AND FRONT SUSPENSION

FRAME

Description All-welded perimeter frames with front crossmember for all models: rear axle upper control arm crossmember for sedans and coupes; center crossmember for wagons. Tubular trans.

Construction All box section front and rear end assemblies. Open channel center rails for crossmember sedans and coupes, box section for wagons. Open channel kickup for wagons, box section for sedans and coupes. Front crossmember rear braces for all models, front braces for wagons.

Body Mounting 8 each side of frame - 14 double cushion and 2 single cushion.

FRONT SUSPENSION

Description Independent, SLA type with coil springs and concentric shock absorbers and spherical joint steering knuckle pivots for each wheel.

Wheel travel (design)
Total 198.1 mm (7.80 in.)
Jounce 90.4 mm (3.56 in.)
Rebound 107.7 mm (4.24 in.)
Wheel to spring, travel ratio 2.06:1

CONTROL ARMS

Description Reinforced steel stamping with pre-loaded, steel encased rubber bushings at pivot.

STEERING KNUCKLES

Description Nodular iron with integral steering arm

Spindle diameters

Inner bearing 31.7 mm (1.25 in.)
Outer bearing 190 mm (0.75 in.)

Spindle thread size 3/4 - 20UNEF-3A (modified)

Wheel bearing

Type Taper roller
Number Two per spindle

SPHERICAL JOINTS

Type Ball studs, upper self-adjusting for wear, lower has a wear indicator

Bearing surfaces

Upper Two bearings; upper surface teflon coated phenolic; lower surface teflon cotton composition
Lower One bearing; steel

SHOCK ABSORBERS

Type Direct, double-acting, hydraulic
Piston diameter 27.0 mm (1.06 in.)

STABILIZER BAR

Type Link
Material HR steel
Diameter 27 mm (1.06 in.)

FRONT WHEEL ALIGNMENT (Curb)

Camber (degrees) $+0.8 \pm 0.8$
Caster (degrees) 3.0 ± 1.0
Toe-in (total) 0.12 ± 0.12
Steering axis inclination (degrees) $9.785 @ 1^\circ$ camber

GENERAL SUSPENSION PROVISIONS

Car leveling Front stabilizer bar
Anti-dive control Angle of front upper control arm
Anti-squat control Rear suspension geometry

FRAME AND FRONT SUSPENSION

FRONT SPRINGS

Selected from a family of coil springs by Electronic Data Processing which identifies the correct springs for the weight of the vehicle including optional equipment ordered by the customer.

FRONT SPRINGS SPECIFICATIONS

Part No.	Assy. Code	Cut-Off Length		Wire Dia.		Total Coils	Deflection Rate		Free		Working	
		mm	in.	mm	in.		N/mm	lbs./in.	mm	in.	mm @ N	in. @ lbs.
370962	ASS	3649.4	143.7	16.8	0.66	9.76	52.5	300	479.6	18.88	300 @ 12512	11.0 @ 2813
370964	AST	3785.6	149.0	17.0	0.67	10.1	52.5	300	484.7	19.08	300 @ 12779	11.0 @ 2873
370976	ARH	3070.9	120.9	15.8	0.62	8.1	52.5	300	444.2	17.49	300 @ 10649	11.0 @ 2394
370977	ARJ	3306.1	130.2	16.2	0.64	8.7	52.5	300	449.1	17.68	300 @ 10911	11.0 @ 2453
370978	ARK	3306.9	130.2	16.2	0.64	8.7	52.5	300	454.3	17.89	300 @ 11182	11.0 @ 2514
370979	ARM	3431.0	135.1	16.4	0.65	9.01	52.5	300	459.4	18.09	300 @ 11449	11.0 @ 2574
370980	ARN	3431.8	135.1	16.4	0.65	9.01	52.5	300	464.3	18.28	300 @ 11712	11.0 @ 2633
370981	ARR	3560.0	140.1	16.6	0.65	9.34	52.5	300	469.5	18.49	300 @ 11978	11.0 @ 2693
370982	ARS	3560.8	140.1	16.6	0.65	9.34	52.5	300	474.6	18.69	300 @ 12250	11.0 @ 2754
370994	ASH	3142.2	123.7	16.8	0.66	8.23	64	365	431.4	16.98	300 @ 12165	11.0 @ 2735
370995	ASJ	3143.0	123.7	16.8	0.66	8.23	64	365	436.5	17.18	300 @ 12494	11.0 @ 2809
370996	ASK	3369.8	132.7	17.2	0.68	8.8	64	365	441.8	17.39	300 @ 12837	11.0 @ 2886
370997	ASM	3370.5	132.7	17.2	0.68	8.8	64	365	447.0	17.60	300 @ 13166	11.0 @ 2960
378501	APA	2735.4	107.7	16.8	0.66	7.15	77	440	402.6	15.85	300 @ 12328	11.0 @ 2794
378502	APB	2920.6	115.0	17.2	0.68	7.62	77	440	407.8	16.05	300 @ 12828	11.0 @ 2884
378503	APC	2921.4	115.0	17.2	0.68	7.62	77	440	412.9	16.25	300 @ 13219	11.0 @ 2972
378504	APD	3119.6	122.8	17.6	0.69	8.12	77	440	418.0	16.46	300 @ 13611	11.0 @ 3060
378505	APF	3120.4	122.8	17.6	0.69	8.12	77	440	423.0	16.65	300 @ 13998	11.0 @ 3147
378506	APH	3329.6	131.1	18.0	0.71	8.64	77	440	428.1	16.85	300 @ 14389	11.0 @ 3235
378507	APJ	3330.3	131.1	18.0	0.71	8.64	77	440	433.3	17.06	300 @ 14790	11.0 @ 3325
378538	APK	3042.6	119.8	16.6	0.65	7.98	64	365	421.1	16.58	300 @ 11489	11.0 @ 2583
378539	APM	3043.5	119.8	16.6	0.65	7.98	64	365	426.2	16.78	300 @ 11818	11.0 @ 2657
378542	APS	2734.6	107.7	16.8	0.66	7.15	77	440	397.7	15.66	300 @ 12050	11.0 @ 2709

STEERING, DRIVELINE, WHEELS AND TIRES

STEERING

Wheel	
Type	Round with center shroud
Diameter	387.3 mm (15.25 in.)
Optional	Tilt steering shaft universally jointed at base of steering wheel; 6 positions; 5 inch vertical travel range.
Column	Energy absorbing mast jacket, shift tube and steering shaft designed to collapse under various front impact conditions.
Gear-Power (Standard)	
Type	Integral, recirculating ball nut, with hydraulic pressure provided from a vane type pump.
Ratios, Gear	
Sedans and Coupes	14.0:1
Station Wagons	16.0:1 on center
Ratios, Overall	
Sedans and Coupes	16.45:1
Station Wagons	18.8:1 on center
Number of Turns, Lock to Lock	
Sedans and Coupes	3.16
Station Wagons	3.30
Linkage	Parallelogram, front of wheels, 2 tie rods
Turning Diameter - Outside Front	
Wall to Wall	
Sedans and Coupes	13.58 m (44.55 ft.)
Station Wagons	13.75 m (45.11 ft.)
Curb to Curb	
Sedans and Coupes	11.83 m (38.81 ft.)
Station Wagons	12.08 m (39.63 ft.)
Outside wheel angle with inside wheel @ 20°	
Sedans and Coupes	19.60°
Station Wagons	19.286°

DRIVELINE

Type	Straight tube
Number Used	One
Diameter (OD)	76.2 mm (3.0 in.)
Length	
Sedans and Coupes	1489.2 mm (58.63 in.)
Station Wagons	1464.3 mm (57.65 in.)
Wall Thickness	1.65 mm (0.065 in.)
Universal Joints	Single Cardan
Number Used	Two
Bearings	Prepack anti-friction

WHEELS

Type	Steel, short spoke disc
Size - Sedans & Coupes	
Millimetres	381 x 152.4
Inches	15 x 6 1/4
Station Wagons	
Millimetres	381 x 177.8
Inches	15 x 7.0
Offset	
Sedans and Coupes	12.7 mm (0.50 in.)
Station Wagons	7.62 mm (0.30 in.)
Attachment to Hub	
Type	5 hex nuts
Thread size	1/2-20 UNF 2B
Bolt Circle Diameter	
Sedans and Coupes	120.65 mm (4.75 in.)
Station Wagons	127.0 mm (5.0 in.)

TIRES, STANDARD EQUIPMENT

Sedans and Coupes	
Type - 4.1 Litre L6	Glass belted radial
5.0 and 5.7 Litre V8	Steel belted radial
Size	FR78-15B
Static Loaded Radius	
Millimetres	304.0
Inches	11.97
Loaded rev/km @ 72 kmh	484
Loaded rev/mi @ 45 mph	779
Capacity @ 165.48 kPa	580
Capacity @ 24 PSI	1280
Station Wagons	
Type	Steel belted radial
Size	HR78-15B
Static Loaded Radius	
Millimetres	315.0
Inches	12.42
Loaded rev/km @ 72 kmh	462
Loaded rev/mi @ 45 mph	744
Capacity @ 165.48 kPa	685
Capacity @ 24 PSI	1510

REAR AXLE AND SUSPENSION

REAR AXLE

Description Semi-floating axle shafts; housing consists of two welded tubes pressed into crossbore of cast iron differential carrier. Carrier contains an overhung pinion and hypoid gear supported by two taper roller bearings.

Drive pinion to ring gear offset . . . 13.2 mm (0.52 in.)

Hypoid gear PD (See Power Train Section, page 2, for application)

2.56	. . . . .	190.5 mm (7.50 in.)
2.56, 2.73, 3.08	. . . . .	215.9 mm (8.50 in.)
273, 3.08	. . . . .	222.2 mm (8.75 in.)

Pinion bearing adjustment Shim

Lubricant

Type Military Spec. MIL-L-2105B

Viscosity 80W-90

Capacity - litres (pints)

7.50 Hypoid gear P.D.	. . . . .	1.5 (3.25)
8.50 & 8.75 Hypoid Gear P.D.	. . . . .	1.9 (4.0)

AXLE SHAFT

Type Forged and hardened steel with integral drive flange

Wheel bearings Single row cylindrical roller, one per wheel

Oil seal Steel encased, spring loaded synthetic rubber

RING AND PINION GEAR TOOTH COMBINATIONS

7.50 Ring gear diameter

2.56	41,16
------	-----------	-------

8.50 Ring gear diameter

2.56	. . . . .	41,16
2.73	. . . . .	41,15
3.08	. . . . .	40,13

RING AND PINION GEAR TOOTH COMBINATIONS

8.75 Ring gear diameter

2.73	. . . . .	41,15
3.08	. . . . .	40,13

POSITRACTION DIFFERENTIAL (See Power Trains)

Type Two pinion with multiple disc clutch

REAR SUSPENSION, REGULAR PRODUCTION

Description Four-link type. Two upper control arms bias mounted and two lower control arms parallel mounted.

Wheel Travel (design)

Total

Sedans and Coupes	. . . . .	239.0 mm (9.41 in.)
Station Wagons	. . . . .	213.1 mm (8.39 in.)

Jounce

Sedans and Coupes	. . . . .	122.7 mm (4.83 in.)
Station Wagons	. . . . .	101.1 mm (3.98 in.)

Rebound

Sedans and Coupes	. . . . .	116.3 mm (4.58 in.)
Station Wagons	. . . . .	112.0 mm (4.41 in.)

Wheel to spring travel ratio 1.01:1

SHOCK ABSORBERS

Type Direct double acting, hydraulic

Piston diameter 27.0 mm (1.06 in.)

REAR AXLE AND SUSPENSION

REAR SPRINGS

Selected from a family of springs by Electronic Data Processing which identifies the correct springs for the weight of the vehicle including optional equipment ordered by the customer.

REAR SPRING SPECIFICATIONS

Part No.	Assy. Code	Cut-Off Length		Wire Dia.		Total Coils	Deflection Rate		HEIGHTS			
		mm	in.	mm	in.		N/mm	lbs./in.	Free		Working	
									mm	in.	mm @ N	in. @ lbs.
482056	NDA	3193	125.7	13.72	.543	7.36	17.5	100	482.6	19.00	254 @ 5907	10.0 @ 1328
482057	NDB	3348	131.8	13.99	.551	7.68	17.5	100	495.3	19.50	254 @ 6129	10.0 @ 1378
482058	NDC	3490	137.4	14.17	.558	7.96	17.5	100	508.0	20.00	254 @ 6352	10.0 @ 1428
482059	NDD	3635	143.1	14.35	.565	8.24	17.5	100	520.7	20.50	254 @ 6574	10.0 @ 1478
482085	YG	2995	117.9	15.16	.597	6.91	27.1	155	409.7	16.13	254 @ 7175	10.0 @ 1613
482086	YH	2995	117.9	15.16	.597	6.91	27.1	155	417.8	16.45	254 @ 7397	10.0 @ 1663
482087	YJ	3193	125.7	15.47	.609	7.30	27.1	155	425.9	16.77	254 @ 7619	10.0 @ 1713
482088	YK	3193	125.7	15.47	.609	7.30	27.1	155	434.3	17.10	254 @ 7842	10.0 @ 1763
482089	YL	3294	129.7	15.62	.615	7.50	27.1	155	442.5	17.42	254 @ 8064	10.0 @ 1813
485696	-	2601	102.4	16.51	.650	5.74	36.8	210	363.0	14.29	254 @ 9118	10.0 @ 2050
485697	-	2677	105.4	16.66	.656	5.87	36.8	210	368.8	14.52	254 @ 9341	10.0 @ 2100
485698	-	2753	108.4	16.81	.662	6.01	36.8	210	374.9	14.76	254 @ 9563	10.0 @ 2150
485714	WS	3106	122.3	13.84	.545	7.19	17.5	100	457.2	18.00	254 @ 5729	10.0 @ 1288
485715	WT	3183	125.3	13.94	.549	7.34	17.5	100	469.9	18.50	254 @ 5951	10.0 @ 1338
485748	XY	2807	110.5	15.04	.592	6.53	27.1	155	401.6	15.81	254 @ 7366	10.0 @ 1656
527777	NDN	2692	106.0	15.67	.617	5.93	28.9	165	398.0	15.67	254 @ 7610	10.0 @ 1711
527778	NDP	2817	110.9	15.87	.625	6.16	28.9	165	407.9	16.06	254 @ 7900	10.0 @ 1776
527779	NDR	2931	115.4	16.10	.634	6.36	28.9	165	417.8	16.45	254 @ 8189	10.0 @ 1841
527780	NDS	2931	115.4	16.10	.634	6.36	28.9	165	428.0	16.85	254 @ 8478	10.0 @ 1906
527781	NDT	2753	108.4	16.81	.662	6.01	36.8	210	384.5	15.14	254 @ 9194	10.0 @ 2067
527782	NDU	2857	112.5	17.02	.670	6.20	36.8	210	394.2	15.52	254 @ 9550	10.0 @ 2147
547295	NFB	2586	101.8	15.47	.609	5.74	28.9	165	387.8	15.27	254 @ 7321	10.0 @ 1646

BRAKES

		Sedans and Coupes	Station Wagons	
General	Type	Power assisted disc front and drum rear		
	System	Dual circuit hydraulic system with warning light and self-adjusting features; metering and proportioning valve (except Station Wagons) provide balance between front and rear brakes		
Front Brakes	Type	Disc - single piston floating caliper		
	Material	Cast iron - vented		
	Diameter and width - mm (in.)	279 x 26.2 (11.0 x 1.03)	301.2 x 26.2 (11.86 x 1.03)	
	Lining material	Molded asbestos composition		
	Method of attachment	Riveted		
	Lining size (length x width x thickness)	Inboard - mm (in.)	137.2 x 48.8 x 11.81 (5.40 x 1.92 x 0.465)	
		Outboard - mm (in.)	137.2 x 48.8 x 11.81 (5.40 x 1.92 x 0.465)	
	Lining area - cm ² (in. ²)	267.5 (41.47)		
	Eff. Area - cm ² (in. ²)	237.4 (36.8)		
	Swept Area - cm ² (in. ²)	1356.9 (210.37)	1521.8 (235.94)	
Piston diameter - mm (in.)	74.7 (2.94)			
Rear Brakes	Type	Finned drum - composite, web cast into rim		
	Material	Molded asbestos composition		
	Dia. and width - mm (in.)	241.3 x 50.8 (9.5 x 2.0)	279.4 x 50.8 (11.0 x 2.0)	
	Lining material	Molded asbestos composition		
	Method of attachment	Riveted		
	Lining Size (length x width x thickness)	Primary	mm	192.5 x 50.8 x 5.0
			in.	7.58 x 2.0 x 0.196
		Secondary	mm	249.7 x 50.8 x 6.73
			in.	9.83 x 2.0 x 0.265
	Lining area - cm ² (in. ²)	449.2 (69.64)	524.5 (81.32)	
Eff. Area - cm ² (in. ²)	411.0 (63.72)	479.7 (74.37)		
Swept Area - cm ² (in. ²)	748.6 (116.06)	891.4 (138.20)		
Piston diameter - mm (in.)	22.2 (0.875)	23.81 (0.9375)		
Apply System	Master cylinder dia. - mm (in.)	28.6 (1.125)		
	Piston travel - mm (in.)	35.8 (1.41)		
	Pedal travel - mm (in.)	39.6 (1.56)		
	Pedal ratio	3.50:1		
	Line pressure @ 100 lb. pedal load	kPa		
PSI				
Parking Brake	Type	Mechanical; pull rods and cables operate rear service brakes; parking brake "ON" warning light provided		
	Control	Pendulum foot pedal; released by "T" handle located below instrument panel to left of steering column.		
	Total effective area - cm ² (in. ²)	411.0 (63.72)	479.7 (74.37)	

BULBS AND LAMPS

BULBS AND LAMPS	NUMBER REQUIRED AND TRADE NUMBER	CANDLE POWER PER LAMP
Ash tray lamp	1-1445	7
Back-up	2-1156	32
Brake warning	1-194	2
Clock Illumination	1-1816	3
Courtesy		
Instrument panel	2-89	6
Direction signal indicator	2-194	2
Door open indicator	1-194	2
Dome	1-211	12
Dome reading lamp		
Reading	2-1004	15
Dome	1-211	12
End gate door indicator	1-194	2
Generator indicator	1-194	2
Glove compartment	1-1891	2
Headlamp hi-beam indicator	1-194	2
Headlamp		
Outer	2-4652	High beam 37.5W Low beam 40.0W
Inner	2-4651	High beam 50.0W
Heater controls	1-194	3
Instrument cluster	5-168	3
License plate, rear	1-194	2
Luggage compartment	1-1003	15
Oil pressure indicator	1-194	2
Parking		
Park		2.2
Turn	2-1157NA	24
Seat belt warning	2-194	2
Side Marker - Front	2-194	2
Side Marker - Rear	2-194	2
Radio dial RPO U63 and/or U69	1-216	3
Radio dial and indicator	1-216 (dial)	1-dial
RPO U58	1-66 (indicator)	.1-indicator
Radio dial and indicator	1-1893 (dial)	2-dial
RPO UM1 and/or UM2	1-DS410 (indicator)	.1-indicator
Tail, stop and turn	1157*	Tail, 3; stop & turn, 32
Temperature indicator	1-194	2
Underhood	1-93	15
W/S washer & light switch indicator	1-194	2

*-Station wagons 2; balance 4.

FUSES AND CIRCUIT BREAKERS

CIRCUIT	TYPE OF PROTECTION	LOCATION AND CIRCUIT*
Air conditioning	30 amp fuse	In line
	25 amp fuse	Fuse panel (h)
Ash tray lamp	5 amp fuse	Fuse panel (f)
Back-up lamps	20 amp fuse	Fuse panel (b)
Brake warning lamp	10 amp fuse	Fuse panel (c)
Choke pull-out solenoid	10 amp fuse	Fuse panel (g)
Cigarette lighter	20 amp fuse	Fuse panel (e)
Clock	20 amp fuse	Fuse panel (e)
Clock illumination	5 amp fuse	Fuse panel (f)
Courtesy lamps	20 amp fuse	Fuse panel (e)
Defroster rear window	10 amp fuse	Fuse panel (c)
Direction signal indicator lamps	20 amp fuse	Fuse panel (b)
Dome lamp & reading lamp	20 amp fuse	Fuse panel (e)
Door open indicator	20 amp fuse	Fuse panel (d)
End gate ajar lamp	10 amp fuse	Fuse panel (c)
Fuel gauge	10 amp fuse	Fuse panel (c)
Generator indicator lamp	25 amp fuse	Fuse panel (h)
Glove compartment lamp	20 amp fuse	Fuse panel (e)
Headlamps	Circuit breaker	Light switch
Headlamps hi-beam indicator lamp	Circuit breaker	Light switch
Heater	25 amp fuse	Fuse panel (h)
Heater control lamp	5 amp fuse	Fuse panel (f)
Instrument cluster lamps	5 amp fuse	Fuse panel (f)
Key buzzer	20 amp fuse	Fuse panel (e)
License plate lamp, rear	20 amp fuse	Fuse panel (d)
Luggage compartment lamp	20 amp fuse	Fuse panel (e)
Oil pressure indicator lamp	10 amp fuse	Fuse panel (c)
Override -- Head light buzzer	10 amp fuse	Fuse panel (C)
Park and turn lamps - front	20 amp fuse	Fuse panel (d)
Power heat valve solenoid	10 amp fuse	Fuse panel (g)
Power seat	30 amp CB	Fuse panel
Power tailgate window	30 amp CB	Fuse panel
Power tailgate window relay	20 amp fuse	Fuse panel (b)
Power windows	20 amp CB	Firewall
Radio	10 amp fuse	Fuse panel (g)
Radio lamp	5 amp fuse	Fuse panel (f)
Seat belt warning lamp	10 amp fuse	Fuse panel (c)
Seat belt warning buzzer	10 amp fuse	Fuse panel (c)
Side marker lamp - front	20 amp fuse	Fuse panel (d)
Side marker lamp - rear	20 amp fuse	Fuse panel (d)
Speed cruise control	10 amp fuse	Fuse panel (c)
Stop and turn lamps	20 amp fuse	Fuse panel (a)
Tail lamps	20 amp fuse	Fuse panel (d)
Temperature indicator lamp	10 amp fuse	Fuse panel (c)
Traffic hazard indicator	20 amp fuse	Fuse panel (a)
Underhood lamp	15 amp fuse	In line
Windshield wiper, two-speed	25 amp fuse	Fuse panel
Wiper system - pulse	10 amp fuse	Fuse panel (g)
Transmission downshift	10 amp fuse	Fuse panel (g)

*Letter suffix indicates same circuit



POWER TRAINS

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POWER TEAM COMBINATIONS

ENGINE	TRANSMISSION	MODEL APPLICATION	AXLE RATIOS*			RING GEAR
			BASE	HIGHWAY	HIGH ALTITUDE	
4.1 Litre L6 (250 Cu.In.) L22 Base - All States	Turbo Hydra-matic	Coupes and Sedans	2.73:1	3.08:1	3.08:1	216 mm (8.50 in.)
5.0 Litre V8 (305 Cu.In.) LG3 Optional - All States (a)	Turbo Hydra-matic	Coupes and Sedans	2.56:1	—	—	191 mm (7.50 in.) (b)
		Station Wagons (c)	2.73:1			222.2 mm (8.75 in.)
5.7 Litre V8 (350 Cu.In.) LM1 Optional - All States	Turbo Hydra-matic	Coupes and Sedans	2.56:1	3.08:1	3.08:1	191 mm (7.50 in.)
		Station Wagons	2.73:1	3.08:1	3.08:1	222.2 mm (8.75 in.)

*-Positraction axles available optionally for all ratios; same ratios available with Air Conditioning.

(a)-Base engine for Station Wagons - optional other models listed.

(b) - Impala coupe 216 mm (8.50 in); Impala sedan and Caprice coupe and sedan as shown.

(c) - Not available in California.

MULTIPLICATION FACTORS

WITH AUTOMATIC TRANSMISSIONS

ENGINE	TRANSMISSION	SELECTOR POSITION	TOTAL TORQUE MULTIPLICATION	AXLE RATIO
4.1 Litre L6 Base - (L22) (All Models except Station Wagons)	Turbo Hydra-matic	Drive	13.76:1 - 2.73:1	2.73:1
		Low	13.76:1 - 6.88:1	
		Second	13.76:1 - 4.15:1	
		Reverse	10.59:1 - 5.30:1	
5.0 Litre V8 Optional - (LG3) (All Models except Station Wagons)	Turbo Hydra-matic	Drive	16.49:1 - 2.56:1	2.56:1
		Low	16.49:1 - 7.01:1	
		Second	16.49:1 - 4.02:1	
		Reverse	12.44:1 - 5.30:1	
5.7 Litre V8 Optional - (LM1) (All models except Station Wagons)	Turbo Hydra-matic	Drive	16.49:1 - 2.56:1	2.56:1
		Low	16.49:1 - 7.01:1	
		Second	16.49:1 - 4.02:1	
		Reverse	12.44:1 - 5.30:1	
5.0 Litre V8 Base - (LG3) (Station Wagons only)	Turbo Hydra-matic	Drive	13.76:1 - 2.73:1	2.73:1
		Low	13.76:1 - 6.88:1	
		Second	13.76:1 - 4.15:1	
		Reverse	10.59:1 - 5.30:1	
5.7 Litre V8 Optional - (LM1) (Station Wagons only)	Turbo Hydra-matic	Drive	13.76:1 - 2.73:1	2.73:1
		Low	13.76:1 - 6.88:1	
		Second	13.76:1 - 4.15:1	
		Reverse	10.59:1 - 5.30:1	

ENGINE DATA AND RATINGS

GENERAL DATA

Engine Type		L6-OHV	V8-OHV		
Piston Displacement	Litres	4.1	5.0	5.7	
	Cubic Inches	250	305	350	
Availability		Std. (L22)	RPO LG3	RPO LM1	
Number of Cylinders		Six	Eight		
Bore and Stroke	Millimetres	98.42 x 89.66	94.89 x 88.4	101.6 x 88.4	
	Inches	3.875 x 3.53	3.736 x 3.48	4.00 x 3.48	
Compression Ratio		8.3:1	8.5:1		
Taxable (SAE)	Kilowatts	26.9	33.3	38.2	
	Horsepower	36.0	44.7	51.2	
Firing Order		1-5-3-6-2-4	1-8-4-3-6-5-7-2		
Idling Speed	Automatic (In Drive)	550	500		
Compression Press. @ Cranking Speed, Engine Hot	Kilopascals	896	1103		
	Pounds/Sq. In.	130	160		
Power Plant Mounting		Two front and one rear			
Measurements	Length	Millimetres	908.8	801.4	
		Inches	35.78	31.55	
	Height	Millimetres	691.4	751.8	724.4
		Inches	27.22	29.60	28.52
	Width	Millimetres	451.1	724.7	
		Inches	17.76	28.53	

ADVERTISED ENGINE RATING

Engine Designation			4.1 Litre - L6 (250 Cu. In.)	5.0 Litre - V8† (305 Cu. In.)	5.7 Litre - V8 (350 Cu. In.)
Availability			Std. - L22	RPO LG3	RPO LM1
Carburetor			Single Bbl.	Two Bbl.	Four Bbl.
Net Brake - RPM	Federal	Kilowatts	82 @ 3800	108 @ 3800	127 @ 3800
		Horsepower	110 @ 3800 (a)	145 @ 3800	170 @ 3800
	California	Kilowatts	67 @ 3600	101 @ 3800	119 @ 3800
		Horsepower	90 @ 3600	135 @ 3800	160 @ 3800 (a)
Net Torque - RPM	Federal	Newton/Metre	264 @ 1600	332 @ 2400	366 @ 2400
		Pound/Foot	195 @ 1600	245 @ 2400	270 @ 2400
	California	Newton/Metre	244 @ 1600	325 @ 2400	352 @ 2400
		Pound/Foot	180 @ 1600	240 @ 2000	260 @ 2400

† - Base on Station Wagon models.

(a) Also Federal ratings above 4000 feet altitude.

ENGINE SPEED AND PISTON TRAVEL

4.1 LITRE L6 ENGINE (BASE - L22)

Model Availability		Coupes and Sedans	
Transmission		Turbo Hydra-matic	
Rear Axle Ratio		2.73:1	
Tire Size		FR78-15B	
Crankshaft Revolutions per	Kilometre	1321.3	
	Mile	2126.7	
Crankshaft Rev/Min @ 1 Kilometer/Hour & 1 Mile/Hour	Low	km/h	55.4
		m/h	89.3
	Second	km/h	33.4
		m/h	53.9
	Third	km/h	22.0
		m/h	35.4
	Reverse	km/h	42.7
		m/h	68.8
Piston Travel	Millimetre/Kilometre	777.3	
	Foot/Mile	1251.2	

5.0 AND 5.7 LITRE V8 ENGINE (RPO LG3 AND LM1)

Model Availability		Coupes and Sedans		Station Wagons	
Transmission		Turbo Hydra-matic			
Rear Axle Ratio		2.56:1		2.73:1	
Tire Size		FR78-15B		HR78-15B	
Crankshaft Revolutions per	Kilometre	1239.0		1261.3	
	Mile	1994.2		2031.1	
Crankshaft Rev/Min @ 1 Kilometer/Hour & 1 Mile/Hour	Low	km/h	56.4	52.9	
		m/h	91.1	85.3	
	Second	km/h	32.3	31.9	
		m/h	52.2	51.4	
	Third	km/h	20.6	21.0	
		m/h	33.2	33.8	
	Reverse	km/h	42.6	40.7	
		m/h	68.8	65.7	
Piston Travel	Millimetre/Kilometre	719.0		732.0	
	Foot/Mile	1157.0		1178.0	

VEHICLE PERFORMANCE FACTORS

ENGINE	4.1 LITRE 250 CU. IN. 110 HP 82 kW	5.0 LITRE 305 CU. IN. 145 HP 108 kW	5.7 LITRE 350 CU. IN. 170 HP 127 kW
MODEL	1BL69	1BN69	1BN69

TURBO HYDRA-MATIC

Performance	Mass-Kilograms	1939	2001	1999
	Weight-Pounds	4275	4412	4408
Kilograms per Net Kilowatt	Federal	23.65	18.53	15.74
	California	23.65	18.53	15.74
Pounds per Net Horsepower	Federal	38.86	30.43	25.93
	California	47.5	32.68	27.55
Kilograms per Litre Displacement		472.9	400.2	350.7
Pounds per Cu. In. Displacement		17.1	14.5	12.6
Net kW/Litre Displacement	Federal	20.0	21.6	22.28
	California	20.0	21.6	22.28
Net HP/Cu. In. Displacement	Federal	.440	.475	.486
	California	.360	.443	.457
Power Displacement	Litre/kilometre	95.7	116.7	133.1
	Cu.Ft./mile	153.8	176.0	202.0
Displacement Factor		44.8	52.9	60.4
Factor		71.9	79.8	91.6

GLOSSARY

(English equivalent is bracketed)

Performance Weight (Mass)	Curb Weight (Mass) plus average weight of four passengers - 272.2 kg (600 lbs.)
Power Displacement	$\frac{\text{Crankshaft Revs/km (Revs/Mi)} \times \text{Piston Displacement}}{2 \times 28.3 \text{ Cu. Litres (2 x 1728 cu. in.)}}$
Displacement Factor	$\frac{\text{Power Displacement}}{\text{Performance Weight (tons) Mass (tonne)}}$

PRINCIPAL COMPONENTS

CYLINDER BLOCK

Material Cast alloy iron

Bore Diameter

Engine	Millimetres	Inches
4.1 Litre L6	98.4123-98.4885	3.8745-3.8775
5.0 Litre V8	94.8817-94.9579	3.7355-3.7385
5.7 Litre V8	101.5873-101.6635	3.9995-4.0025

Bore Spacing (C/L to C/L) 111.76 mm (4.4 in.)

Bearing Caps (Number, material and attachment)

4.1 Litre L6 7, cast iron, 2-bolt
 5.0 & 5.7 Litre V8 5, cast iron, 2-bolt
 Water Jacket Full length around each cylinder

CYLINDER HEAD

Material High chrome cast alloy iron

Bolts, Number

4.1 Litre L6 14
 5.0 & 5.7 Litre V8 34

Bolt, Dia.

4.1 Litre L6 12.7 mm (.50 in.)
 5.0 & 5.7 Litre V8 11.112 mm (.4375 in.)

COMBUSTION CHAMBER VOLUME

(Total chamber volume of assembled engine with piston at top center)

Engine	Litres	Cu. In.
4.1 Litre L6	0.095	5.77
5.0 Litre V8	0.084	5.13
5.7 Litre V8	0.103	6.27

INLET MANIFOLD

Material Cast alloy iron

- Model 1BN69 w/5.7 Litre Aluminum

Type

4.1 Litre L6 Integral with cylinder head
 5.0 & 5.7 Litre V8 8 port, double deck

EXHAUST MANIFOLD

Material Cast alloy iron

Type

4.1 Litre L6 4 port, underslung, center downtake
 5.0 & 5.7 Litre V8 Dual, 4 port, rear downtake

Outlet Diameter

4.1 Litre L6 57.1 mm (2.25 in.)
 5.0 & 5.7 Litre V8 50.8 mm (2.0 in.)

CRANKSHAFT

Material Cast nodular iron

End Play

4.1 Litre L6 0.05-0.15 mm (.002-.006 in.)
 5.0 & 5.7 Litre V8 0.05-0.18 mm (.002-.007 in.)

Counterweights

4.1 Litre L6 12
 5.0 & 5.7 Litre V8 6

Crank Arm Length

4.1 Litre L6 44.83 mm (1.765 in.)
 5.0 & 5.7 Litre V8 44.20 mm (1.74 in.)

Torsional Damper Rubber mounted inertia

Timing Gear

4.1 Litre L6 Cast iron
 5.0 & 5.7 Litre V8 Sintered iron

- Pulley Pitch Diameter 168.7 mm (6.64 in.)

MAIN BEARINGS

Material Steel backed insert;
 (copper lead alloy or premium aluminum lining selected for specific engine application)

Type Precision removable

Thrust Against Bearing

4.1 Litre L6 Number 7
 5.0 & 5.7 Litre V8 Number 5

Clearance

4.1 Litre L6 0.007-0.074 mm (.0003-.0029 in.)
 5.0 & 5.7 Litre V8
 No. 1 0.020-0.051 mm (.0008-.0020 in.)
 No. 2-4 0.028-0.058 mm (.0011-.0023 in.)
 No. 5 0.043-0.084 mm (.0017-.0033 in.)

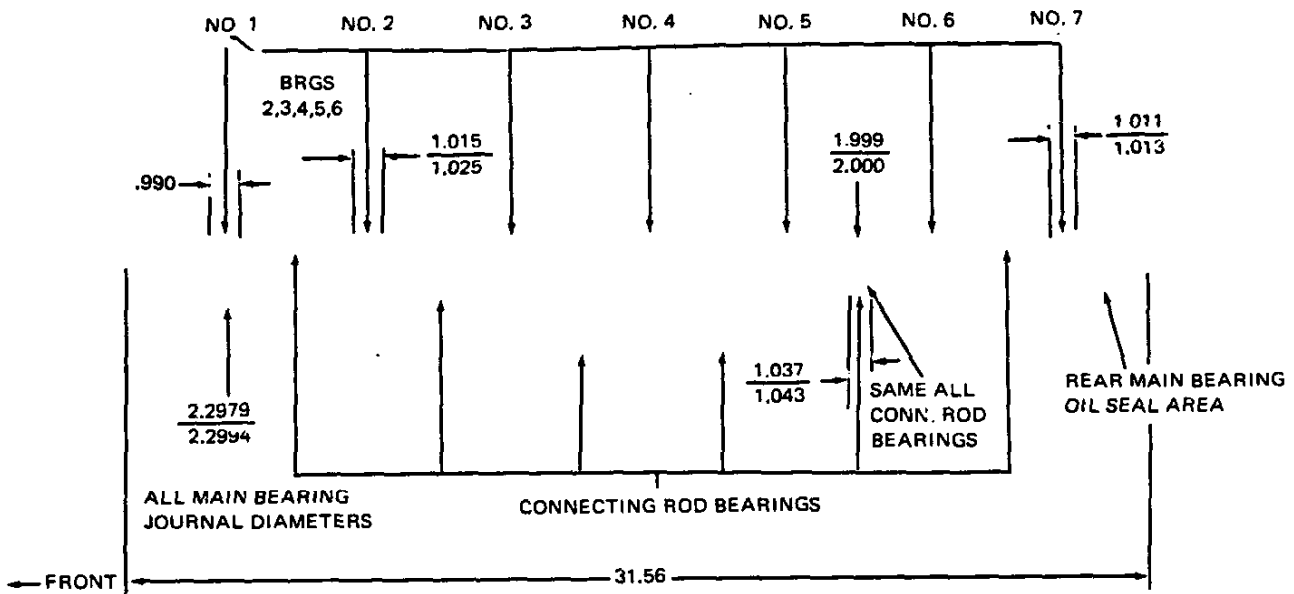
	Theoretical Inner Dia.	Effective Length	Projected Area
4.1 Litre L6			
No. 1-6			
- Millimetres	58.417	19.10	11.15 cm ²
- Inches	2.2999	.752	1.7295 in. ²
No. 7			
- Millimetres	58.417	19.30	11.27 cm ²
- Inches	2.2999	.760	1.7479 in. ²
5.0 & 5.7 Litre V8			
No. 1-4			
- Millimetres	62.235	19.10	11.88 cm ²
- Inches	2.4502	.752	1.8425 in. ²
No. 5			
- Millimetres	62.250	29.97	18.65 cm ²
- Inches	2.4508	1.180	2.8919 in. ²

PRINCIPAL COMPONENTS

CRANKSHAFTS AND BEARINGS

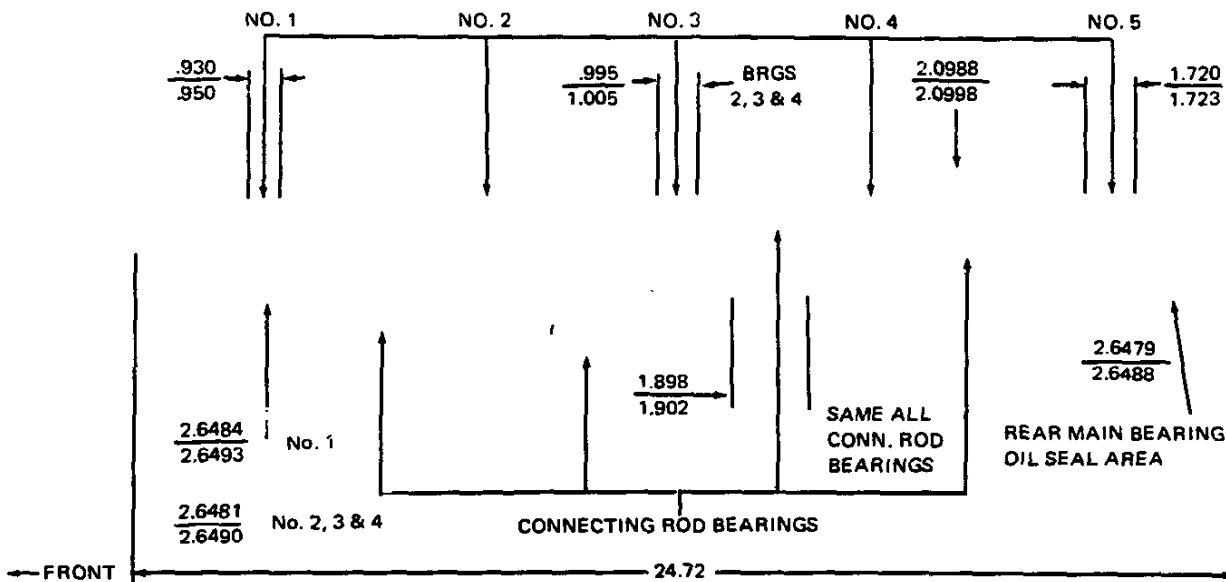
250 CUBIC INCH SIX CYLINDER ENGINE

MAIN BEARINGS



V8-305 & 350 CUBIC INCH V-8 ENGINES

MAIN BEARING JOURNALS



PRINCIPAL COMPONENTS

CAMSHAFT

Material Cast alloy iron

Drive
 4.1 Litre L6 Gear: aluminum alloy
 5.0 & 5.7 Litre V8 Sprocket and chain, sintered iron

Lobe Lift	Inlet	Exhaust
4.1 Litre L6		
Millimetres	5.631	5.880
Inches	.2217	.2315
5.0 Litre V8		
Millimetres	6.309	6.774
Inches	.2484	.2667
5.7 Litre V8		
Millimetres	6.604	6.942
Inches	.2600	.2733

Camshaft Bearings Steel backed babbit

VALVE TRAIN

Type Individually mounted, overhead rocker arms, push rod actuated

Rocker Arms Stamped steel Ratio

4.1 Litre L6 1.75:1
 5.0 & 5.7 Litre V8 1.50:1

Push Rods

Material Welded steel tubing

Diameter 7.937 mm (.3125 in.)

Length

4.1 Litre L6 244.14 mm (9.612 in.)
 5.0 & 5.7 Litre V8 196.19 mm (7.724 in.)

Rotators

5.0 & 5.7 Litre V8 Exhaust

VALVE SPRINGS

Diameter

4.1 Litre L6 22.15-22.35 mm (.872-.880 in.)
 5.0 & 5.7 Litre V8 22.05-22.45 mm (.868-.884 in.)

Installed Length

Valves closed N @ mm I b. @ in.

4.1 Litre L6
 346.944-382.528 @ 42.2 | 78-86 @ 1.66

5.0 & 5.7 Litre V8

Inlet 341.088-376.992 @ 43.2 | 76-84 @ 1.70

Exhaust 341.088-376.992 @ 41.0 | 76-84 @ 1.61

Valves opened

4.1 Litre L6
 756.16-800.64 @ 32.0 | 170-180 @ 1.26

5.0 & 5.7 Litre V8

Inlet 773.9-827.3 @ 31.7 | 174-186 @ 1.25

Exhaust 818.4-871.8 @ 29.5 | 184-196 @ 1.16

Free Length

4.1 Litre L6 43.8 mm (1.90 in.)

5.0 & 5.7 Litre V8 51.6 mm (2.03 in.)

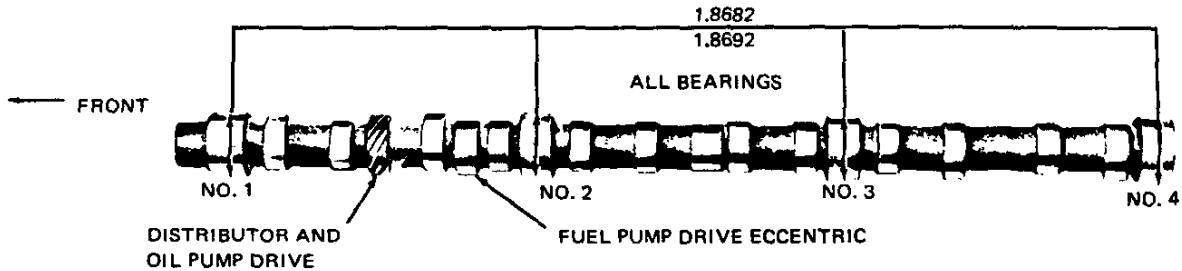
Valve Spring Damper

4.1 Litre L6 None

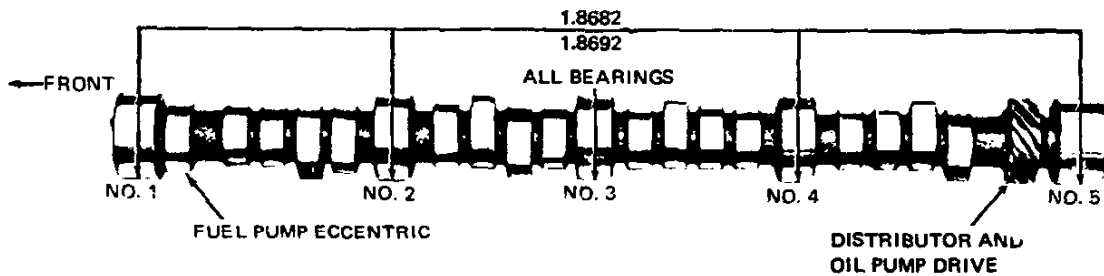
5.0 & 5.7 Litre V8 Flat steel, 4 coils

CAMSHAFT AND BEARINGS

250 CUBIC INCH L-6 ENGINE



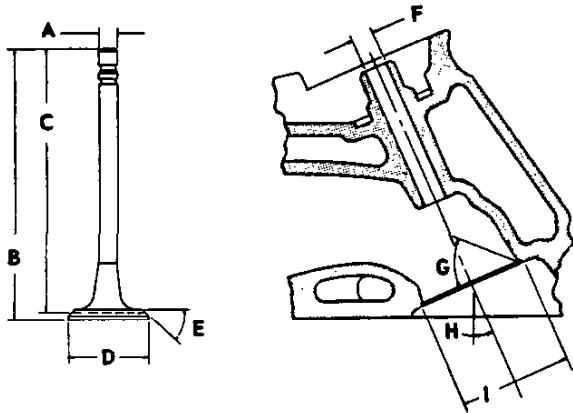
V8-305 & 350 CUBIC INCH V-8 ENGINES



PRINCIPAL COMPONENTS

INLET VALVES

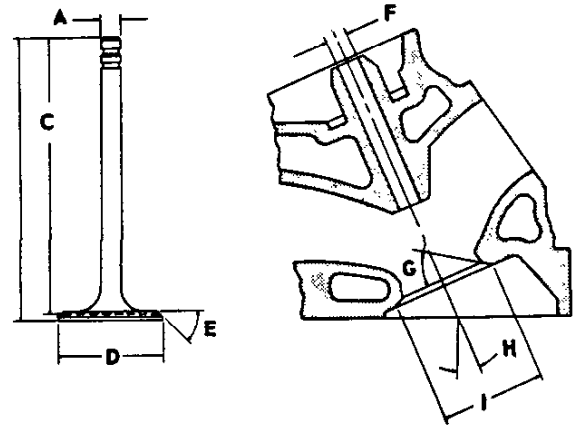
Material	Alloy steel
Coating	
4.1 Litre L6 & 5.0 Litre V8	Aluminized face
5.7 Litre V8	None
All stems	Chrome flash



A - Stem Diameter	
4.1 Litre L6	8.661-8.679 mm (.3410-.3417 in.)
5.0 & 5.7 Litre V8 ..	8.661-8.679 mm (.3410-.3417 in.)
B - Overall Length	
4.1 Litre L6	124.51-125.02 mm (4.902-4.922 in.)
5.0 Litre V8	124.51-125.02 mm (4.902-4.922 in.)
5.7 Litre V8	123.70-124.18 mm (4.870-4.899 in.)
C - Gage Length	
4.1 Litre L6	121.54-121.79 mm (4.785-4.795 in.)
5.0 & 5.7 Litre V8 ..	121.54-121.79 mm (4.785-4.795 in.)
D - Overall Head Diameter	
4.1 Litre L6	43.56-43.81 mm (1.715-1.725 in.)
5.0 Litre V8	43.56-43.81 mm (1.715-1.725 in.)
5.7 Litre V8	49.15-49.28 mm (1.935-1.945 in.)
E - Angle of Face	45°
F - Guide Diameter	
4.1 Litre L6	8.704-8.730 mm (.3427-.3437 in.)
5.0 & 5.7 Litre V8 ..	8.704-8.730 mm (.3427-.3437 in.)
G - Angle of Seat	46°
H - Valve Angle	
4.1 Litre L6	9°
5.0 & 5.7 Litre V8 ..	23°
I - Valve Seat (cutter) Diameter	
4.1 Litre L6	40.41-40.56 mm (1.591-1.597 in.)
5.0 & 5.7 Litre V8 ..	46.30-46.46 mm (1.823-1.829 in.)

EXHAUST VALVES

Material	High alloy steel
Coating	
4.1 Litre L6	Aluminized face
5.0 & 5.7 Litre V8	Aluminized face
All stems	Chrome flash



A - Stem Diameter	
4.1 Litre L6	8.661-8.679 mm (.3410-.3417 in.)
5.0 & 5.7 Litre V8 ..	8.661-8.679 mm (.3410-.3417 in.)
B - Overall Length	
4.1 Litre L6	124.79-125.30 mm (4.913-4.933 in.)
5.0 & 5.7 Litre V8 ..	124.71-125.22 mm (4.910-4.930 in.)
C - Gage Length	
4.1 Litre L6	119.63-121.69 mm (4.781-4.791 in.)
5.0 & 5.7 Litre V8 ..	119.63-121.69 mm (4.781-4.791 in.)
D - Overall Head Diameter	
4.1 Litre L6	37.91-38.23 mm (1.495-1.505 in.)
5.0 & 5.7 Litre V8 ..	37.91-38.23 mm (1.495-1.505 in.)
E - Angle of Face	45°
F - Guide Diameter	
4.1 Litre L6	8.704-8.730 mm (.3427-.3437 in.)
5.0 & 5.7 Litre V8 ..	8.704-8.730 mm (.3427-.3437 in.)
G - Angle of Seat	46°
H - Valve Angle	
4.1 Litre L6	9°
5.0 & 5.7 Litre V8 ..	23°
I - Valve Seat (cutter) Diameter	
4.1 Litre L6	33.55-33.71 mm (1.321-1.327 in.)
5.0 & 5.7 Litre V8 ..	33.55-33.71 mm (1.321-1.327 in.)

PRINCIPAL COMPONENTS

VALVE LIFT

4.1 Litre L6	
Inlet	9.855 mm (.3880 in.)
Exhaust	10.289 mm (.4051 in.)
5.0 Litre V8	
Inlet	9.467 mm (.3727 in.)
Exhaust	10.414 mm (.4100 in.)
5.7 Litre V8	
Inlet	9.906 mm (.3900 in.)
Exhaust	10.414 mm (.4100 in.)

VALVE TIMING (Crankshaft Degrees-Excluding Ramps)

4.1 Litre L6	
Inlet Valve	
Opens - BTC	16°
Closes - ABC	48°
Duration	244°
Exhaust Valve	
Opens - BBC	64°
Closes - ATC	50°
Duration	294°
5.0 Litre V8	
Inlet Valve	
Opens - BTC	28°
Closes - ABC	64°
Duration	272°
Exhaust Valve	
Opens - BBC	78°
Closes - ATC	30°
Duration	288°
5.7 Litre V8	
Inlet Valve	
Opens - BTC	28°
Closes - ABC	72°
Duration	280°
Exhaust Valve	
Opens - BBC	78°
Closes - ATC	30°
Duration	288°

PISTONS

Material	Cast aluminum alloy
Head Type	Sump
Skirt Type	Slipper
Top Land Clearance	
4.1 Litre L6	0.622-0.851 mm (.0245-.0335 in.)
5.0 Litre V8	0.622-0.851 mm (.0245-.0335 in.)
5.7 Litre V8	0.597-0.825 mm (.0235-.0325 in.)
Skirt Clearance	
4.1 Litre L6	0.013-0.038 mm (.0005-.0015 in.)
5.0 Litre V8	0.043-0.107 mm (.0017-.0042 in.)
5.7 Litre V8	0.018-0.043 mm (.0007-.0017 in.)
Compression Ring Groove Depth	
4.1 Litre L6	5.469-5.634 mm (.2153-.2218 in.)
5.0 Litre V8	5.088-5.265 mm (.2003-.2073 in.)
5.7 Litre V8	5.634-5.862 mm (.2218-.2308 in.)
Oil Ring Groove Depth	
4.1 Litre L6	5.316-5.481 mm (.2093-.2158 in.)
5.0 Litre V8	5.342-5.570 mm (.2103-.2193 in.)
5.7 Litre V8	5.176-5.342 mm (.2038-.2103 in.)
Pin Bore Offset	
1.40-1.65 mm (.055-.065 in.)	
Compression Height	
4.1 Litre L6	42.11-42.21 mm (1.658-1.662 in.)
5.0 & 5.7 Litre V8	39.57-39.67 mm (1.558-1.562 in.)

PISTON PINS

Material	Chromium steel
Length	
4.1 Litre L6	75.95-76.45 mm (2.990-3.010 in.)
5.0 & 5.7 Litre V8	75.95-76.45 mm (2.990-3.010 in.)
Diameter	
4.1 Litre L6	23.546-23.553 mm (.9270-.9273 in.)
5.0 & 5.7 Litre V8	23.546-23.553 mm (.9270-.9273 in.)
Clearance in Piston	
4.1 Litre L6	0.0038-0.0064 mm (.00015-.00025 in.)
5.0 & 5.7 Litre V8	0.0063-0.0089 mm (.00025-.00035 in.)

PRINCIPAL COMPONENTS

COMPRESSION RINGS – UPPER

Material	Cast alloy iron
Type	Straight edge inside of ring
Face	
4.1 Litre L6	Barrel
5.0 & 5.7 Litre V8	Radius
Coating	
4.1 Litre L6	Wear resistant molybdenum inlay, graphite impregnated
5.0 & 5.7 Litre V8	Chrome flash
Width	
4.1 Litre L6	1.969-1.981 mm (.0775-.0780 in.)
5.0 Litre V8	1.956-1.981 mm (.0770-.0780 in.)
5.7 Litre V8	1.969-1.981 mm (.0775-.0780 in.)
Wall Thickness	
4.1 Litre L6	4.67-4.93 mm (.184-.194 in.)
5.0 Litre V8	4.24-4.49 mm (.167-.177 in.)
5.7 Litre V8	4.83-5.08 mm (.190-.200 in.)
Gap	0.25-0.51 mm (.010-.020 in.)

COMPRESSION RINGS – LOWER

Material	Cast alloy iron
Type	
4.1 Litre L6	Inside bevel
5.0 & 5.7 Litre V8	Reverse twist
Face	Tapered
Coating	Wear resistant
Width	
4.1 Litre L6	1.956-1.981 mm (.0770-.0780 in.)
5.0 & 5.7 Litre V8	1.956-1.968 mm (.0770-.0775 in.)
Wall Thickness	
4.1 Litre L6	4.67-4.93 mm (.184-.194 in.)
5.0 Litre V8	4.24-4.49 mm (.167-.177 in.)
5.7 Litre V8	4.83-5.08 mm (.190-.200 in.)
Gap	
4.1 Litre L6	0.25-0.51 mm (.010-.020 in.)
5.0 Litre V8	0.25-0.63 mm (.010-.025 in.)
5.7 Litre V8	0.33-0.63 mm (.013-.025 in.)

OIL CONTROL RINGS

Type	Multi-piece (two rails and one spacer)
Material	
Rails	Steel
Spacer	Alloy steel
Rail Coating	Chrome plating
Width (assembled)	
4.1 Litre L6	4.699-4.750 mm (.1850-.1870 in.)
5.0 Litre V8	4.722-4.773 mm (.1859-.1879 in.)
5.7 Litre V8	4.699-4.750 mm (.1850-.1870 in.)
Wall Thickness	
4.1 Litre L6	3.86-4.01 mm (.152-.158 in.)
5.0 Litre V8	3.50-3.63 mm (.138-.143 in.)
5.7 Litre V8	3.81-3.96 mm (.150-.156 in.)
Gap	
4.1 Litre L6	0.38-1.40 mm (.015-.055 in.)
5.0 Litre V8	0.25-0.89 mm (.010-.035 in.)
5.7 Litre V8	0.38-1.40 mm (.015-.055 in.)

CONNECTING RODS

Material	Drop forged steel
Length (center to center)	
4.1 Litre L6	144.65-144.91 mm (5.695-5.705 in.)
5.0 & 5.7 Litre V8	144.65-144.91 mm (5.695-5.705 in.)

CONNECTING ROD BEARINGS

Material	Premium aluminum
Type	Precision removable
Clearance	
4.1 Litre L6	0.018-0.069 mm (.0007-.0027 in.)
5.0 & 5.7 Litre V8	0.033-0.089 mm (.0013-.0035 in.)
Theoretical I.D.	
4.1 Litre L6	50.843 mm (2.0017 in.)
5.0 & 5.7 Litre V8	53.370 mm (2.1012 in.)
Effective Length	
4.1 Litre L6	20.50 mm (.807 in.)
5.0 & 5.7 Litre V8	20.24 mm (.797 in.)
End Play	
4.1 Litre L6	0.18-0.41 mm (.007-.016 in.)
5.0 & 5.7 Litre V8	0.15-0.41 mm (.006-.016 in.)

FUEL TANK

Capacity	
Sedans & Coupes	79.5 litres (21 gallon)
Station Wagons	83.3 litres (22 gallons)
Fuel Tank Location	Behind rear axle
Filler Location	
Sedans & Coupes	Behind hinged rear license plate
Station Wagons	Left rear quarter panel

FUEL FILTERS, DUAL

In Fuel Tank	Mesh strainer
In Carburetor Inlet	Paper

FUEL PUMP ASSEMBLY

Type	Mechanical, diaphragm
Drive	Camshaft, eccentric
Location	Right side front of engine
Pressure Range (shut off pressure at 1800 RPM)	
4.1 Litre L6	27.6-34.5 kPa (4.0-5.0 PSI)
5.0 & 5.7 Litre V8	51.7-62.1 kPa (7.5-9.0 PSI)

AIR CLEANER

Type	Cylindrical with air horn attached to ducted air inlet
Diameter	
4.1 Litre L6	320.5 mm (12.62 in.)
5.0 & 5.7 Litre V8	393.7 mm (15.5 in.)
Filter Element	Oil-wetted paper

CARBURETORS

Type	
4.1 Litre L6	1-barrel, Monojet
5.0 Litre V8	2-barrel
5.7 Litre V8	4-barrel
SAE Flange Size	1.50
Throttle Bore	
4.1 Litre L6	42.9 mm (1.69 in.)
5.0 Litre V8	42.9 mm (1.69 in.)
5.7 Litre V8	
Primary	35.0 mm (1.38 in.)
Secondary	57.2 mm (2.25 in.)
Secondary Throttle Actuation	By linkage approximately when primary valves are opened halfway between closed and open.
Venturi Diameter	
4.1 Litre L6	33.3 mm (1.31 in.)
5.0 Litre V8	30.2 mm (1.19 in.)
5.7 Litre V8	
Primary	30.9 mm (1.218 in.)
Secondary	Air valve

CHOKE

Type	Automatic
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EXHAUST SYSTEMS

TYPE

4.1 Litre L6	Single with crossover pipes and converter
5.0 & 5.7 Litre V8	Single with crossover pipes and converter

MUFFLERS

Type	One, reverse flow
Construction	Heads and body joined by rolled lock seam construction
Head	1.3716 mm (.054 in.) sheet metal, aluminized
Shell	1.3716 mm (.054 in.) sheet metal, aluminized
Wrap	2.286 mm (.090 in.) indented asbestos sheet
Cover	0.381 mm (.015 in.) sheet metal, aluminized
Body	
Length	540 mm (21.26 in.)
Width (I.D.)	279.4 mm (11.0 in.)
Height (I.D.)	114.5 mm (4.51 in.)

EXHAUST CROSSOVER

Dimensions (O.D. & Wall Thickness)	
5.0 & 5.7 Litre V8	50.8 x 1.016 mm (2.00 x 0.040 in.)

EXHAUST PIPE TO CONVERTER

Dimensions (O.D.)	
4.1 Litre L6	
Federal	50.8 mm (2.0 in.)
California	57.15 mm (2.25 in.)
5.0 & 5.7 Litre V8	63.5 mm (2.50 in.)

EXHAUST PIPE-CONVERTER TO MUFFLER

Dimensions (O.D. & Wall Thickness)	
4.1 Litre L6	57.15 x 1.73 mm (2.25 x 0.068 in.)
5.0 Litre V8	57.15 x 1.73 mm (2.25 x 0.068 in.)
5.7 Litre V8	63.50 x 1.73 mm (2.50 x 0.068 in.)

EXHAUST PIPE-MUFFLER TO RESONATOR

5.7 Litre V8	57.15 x 1.70 mm (2.25 x 0.68 in.)
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RESONATORS (5.7 Litre V8, Sedans with 3.08 axle)

Type	Bottle type
Inner Tube	0.91 mm (.036 in.) sheet steel
Outer Tube	1.37 mm (.054 in.) sheet steel

TAIL PIPES

Dimensions (O.D. & Wall Thickness)	
4.1 Litre L6	50.8 x 1.40 mm (2.0 x 0.55 in.)
5.0 Litre V8	50.8 x 1.40 mm (2.0 x 0.55 in.)
5.7 Litre V8	
Sedans & Coupes	57.15 x 1.80 mm (2.25 x 0.71 in.)
Station Wagons	57.15 x 1.40 mm (2.25 x 0.55 in.)

EMISSION CONTROL EQUIPMENT

SYSTEM APPLICATION

System Type	Engine Adaptation		
	4.1 Litre L22	5.0 Litre LG3	5.7 Litre LM1
PCV - Positive Crankcase Ventilation	***	***	***
EGR - Exhaust Gas Recirculation	***	***	***
CHA - Carburetor Hot Air	***	***	***
MMC - Monolith Manifold Converter	**	-	-
FEC - Fuel Evaporation Control System	***	***	***
CCS - Controlled Combustion System	*	*	*
UFC - Underfloor Converter	***	***	*** (a)
EFE - Early Fuel Evaporation	***	***	***
MAI - Manifold Air Injection	**	**	*** (b)

*-Not available in California.
 **--Available in California only.
 ***--Available - all states.

(a) Below 4000 Feet only.
 (b) Above 4000 Feet only.

BASIC FUNCTION OF SYSTEMS

POSITIVE CRANKCASE VENTILATION

Withdraws oil and gas vapors from the various cavities throughout the engine for burning in all combustion cycle.

EXHAUST GAS RECIRCULATION

Meters exhaust gas into induction system for recirculation through the combustion cycle to reduce oxides of nitrogen emissions.

CARBURETOR HOT AIR

Meters and mixes heated air with incoming cold air to optimize fuel vaporization.

MONOLITH MANIFOLD CONVERTER

The flow of exhaust gases down through the catalyst, within the converter, effectively controls the hydrocarbon and carbon monoxide to a more desirable emission.

MANIFOLD AIR INJECTION

Compresses, regulates and distributes quantities of air to the manifold to more completely burn carbon monoxide and hydrocarbon emissions.

FUEL EVAPORATION CONTROL SYSTEM

Controls emission of gasoline vapor to the atmosphere by means of an integral separator with the fuel tank that separates vapor from liquid fuel - a filler cap that doesn't permit venting into the atmosphere - a canister for storage of vapors - lines, hoses and valves to control and transport vapors from fuel tank to storage, and finally, to the carburetor for utilization in running the engine.

CONTROLLED COMBUSTION SYSTEM

Increases combustion efficiency through leaner carburetor mixtures and revised distributor calibration. Special thermostatically controlled damper, in the air cleaner snorkel maintains warm air intake to carburetor.

UNDERFLOOR CONVERTER

The flow of exhaust gases down through the catalyst, within the converter, effectively controls the hydrocarbon and carbon monoxide to a more desirable emission.

EARLY FUEL EVAPORATION

System is designed to produce a very short engine warm-up cycle to improve vehicle driveability and reduce exhaust emission.

LUBRICATION SYSTEM

GENERAL

Type	Controlled full pressure
Main Bearings	Pressure
Connecting Rods	Pressure
Piston Pins	Splash
Cylinder Walls	
4.1 Litre L6	Main and conn. rod bearing throw-off
5.0 & 5.7 Litre V8	Pressure, jet cross sprayed
Camshaft Bearings	Pressure
Valve Lifters	Pressure
Rocker Arms	Pressure
Timing Gears	
4.1 Litre L6	Nozzle sprayed
5.0 & 5.7 Litre V8	Centrifugally oiled from camshaft bearing
Oil Pressure Sending Unit	
Type	Electric
Actuation	Opens or closes circuit @ 13.79 to 41.37 kPa (2 to 6 PSI)
Oil Filler	
Cap	Positive seal
Location	
4.1 Litre L6	Forward end of rocker cover
5.0 & 5.7 Litre V8	Rearward on left rocker cover

OIL PAN CAPACITIES

Refill	3.78 litres (4.0 quarts)
Refill with Filter Change	4.26 litres (4.5 qts.)

LUBRICANT GRADES AND TEMPERATURES

-6.6°C & Above (20°F & Above)	20W-20, 10W-30, 10W-40, 20W40, 20W50
-17.7°C to +15.5°C (0° to 60°F)	10W, 5W-30, 10W-30, 10W-40
-6.6°C & Below (20°F & Below)	5W-20, 10W-30

OIL PUMP

Type	Gear
Regulator Valve	Opens between 275.8-310.3 kPa (40-45 PSI)
Oil Pressure	
4.1 Litre L6	160-182 kPa (36-41 PSI) @ 2000 RPM
5.0 & 5.7 Litre V8	142-178 kPa (32-40 PSI) @ 2000 RPM
Intake Type	Stationary
Capacity	16.28 litres per minute (4.3 GPM) @ 2000 engine RPM

OIL FILTER

Type	Full flow, throw away canister
Location	
4.1 Litre L6	Right front of engine
5.0 & 5.7 Litre V8	Left rear side of engine
Capacity	0.47 litres (1.0 pint)
Bypass Valve	Opens between 62.05-75.73 kPa (9-11 PSI) drop in pressure

OIL DIPSTICK-LOCATION

4.1 Litre L6	Right side rear of engine block
5.0 & 5.7 Litre V8	Left side, rear of engine block

OIL PAN DRAIN PLUG

Type	Hex head
Location	
4.1 Litre L6	Front lower side of oil pan sump
5.0 & 5.7 Litre V8	Left lower face of oil pan sump
Size of Hex Head	21.84-22.22 mm (.860-.875)
Thread	1/2-20 UNF 2A
Length	20.6 mm (0.81 in.)
Diameter	10.41-10.92 mm (.410-.430 in.)

COOLING SYSTEM

GENERAL

Type Pressure, vented through coolant recovery system

Capacity with Heater

4.1 Litre L6 13.48 litres (14.24 quarts)
5.0 & 5.7 Litre V8 15.7 litres (16.60 quarts)

● RADIATOR

Make and Type . . . Harrison crossflow tube and center Core Constant and Thickness

Distance between fins

4.1 Litre L6
Base 5.6 mm (.22 in.)
A/C and 3.08 Axle 4.6 mm (.18 in.)
5.0 Litre V8
Base, 49 States 6.3 mm (.25 in.)
Base, California (Sed. & Cpe.) . . . 5.6 mm (.22 in.)
A/C, 49 States 5.6 mm (.22 in.)
A/C, Calif. (Sed. & Cpe.) 5.1 mm (.20 in.)
5.7 Litre V8
Base 5.1 mm (.20 in.)
A/C 4.6 mm (.18 in.)

Core Thickness 31.5 mm (1.24 in.)
Frontal Area 3096 cm² (480 sq. in.)
Overflow Separate coolant bottle

● RADIATOR, HEAVY DUTY (RPO V01)

Core Constant and Thickness

Distance between fins
4.1 Litre L6 & 5.0 Litre V8 3.5 mm (.14 in.)
5.7 Litre V8 4.1 mm (.16 in.)
Distance between tubes 14.0 mm (.55 in.)
Core thickness
4.1 Litre L6 & 5.0 Litre V8 31.5 mm (1.24 in.)
5.7 Litre V8 49.8 mm (1.96 in.)
Frontal Area 3096 cm² (480 sq. in.)
Overflow Separate coolant bottle

RADIATOR CAP RELIEF VALVE

Opens at 103.4 kPa (15 PSI)

THERMOSTAT

Type Pellet
Begins to open at 89-92 °C (192-198 °F)
Fully opened at 108 °C (227 °F)

RADIATOR HOSE (I.D.)

Outlet, Lower (radiator to water pump) 44.4 mm (1.75 in.)
Inlet, Upper (thermostat hsg. to radiator) 38.1 mm (1.50 in.)

FAN

Number of Blades 4, staggered
Diameter
4.1 Litre L6 447.5 mm (17.62 in.)
5.0 & 5.7 Litre V8 482.6 mm (19.0 in.)
Fan Pulley Pitch Dia. 177.8 mm (7.0 in.)

BELT - CRANKSHAFT, FAN & GENERATOR

Number Used One
Angle of 'V' 34-38°
Pitch Line
4.1 Litre L6 965 mm (38.0 in.)
5.0 & 5.7 Litre V8
All states except California . . . 1130 mm (44.5 in.)
In California 1194 mm (47.0 in.)
Width
4.1 Litre L6 11.18 mm (.440 in.)
5.0 & 5.7 Litre V8 9.65 mm (.380 in.)

WATER PUMP

Type Centrifugal
Capacity @ 2000 engine RPM
4.1 Litre L6 79.5 litres (21 GPM)
5.0 & 5.7 Litre V8 85.9 litres (22.7 GPM)
Bearing Permanently lubricated double row ball
Drive Fan belt
Ratio (fan to crankshaft RPM)
4.1 Litre L6 1.165:1
5.0 & 5.7 Litre V8949:1

DRAIN LOCATIONS

Engine Block-Plug
4.1 Litre L6 Left side rear
5.0 & 5.7 Litre V8 Right and left center
Radiator - Petcock
All Lower left rear face

ELECTRICAL SYSTEM

SUPPLY SYSTEM

BATTERY

Voltage Rating and Watts	
4.1 Litre L6	12-2500
5.0 & 5.7 Litre V8	12-3200
Number of Cells 6	
Cold Cranking Rating	
4.1 Litre L6	-18°C (0°F) @ 350 amps; -29°C (-20°F) @ 210 amps; 60 minute reserve capacity
5.0 & 5.7 Litre V8	-18°C (0°F) @ 350 amps; -29°C (-20°F) @ 27 amps; 80 minute reserve capacity
Heavy Duty (RPO UA1)	-18°C @ 465 amps; -19°C @ 375 amps; 125 minutes reserve @ 37°C
Terminal Grounded	Negative
Location	Right side front of engine compartment

ALTERNATOR

Type	Diode rectified
Rating	
Amps	37
Volts	12
Drive	By fan belt
Pulley Pitch Diameter	61.7 mm (2.43 in.)
Ratio (Gen. to engine RPM)	2.73:1

REGULATOR

Type	Micro circuit unit; integral with alternator
Voltage	13.8-14.8 @ 29.4°C (85°F)

IGNITION SYSTEM

Type	High Energy Ignition (H.E.I.)
Distributors	Refer to chart below

COIL

Type	Integral with distributor
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SPARK PLUGS

Type	
4.1 Litre L6	R46TS
5.0 & 5.7 Litre V8	R45TS
Thread Size	14 mm (0.55 in.)
Gap	
4.1 Litre L6	0.89 mm (.035 in.)
5.0 & 5.7 Litre V8	1.14 mm (.045 in.)
Torque	33.9 N·m (25 lb. ft.)

CABLE	Fiberglass core impregnated with electrical conducting material and insulation of rubber with neoprene jacket.
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STARTING SYSTEM

STARTING MOTOR

Rotation (Drive End View)	Clockwise
Test Conditions	Engine at operating temp.
No load test	
Amps	
4.1 Litre L6	49-87
5.0 & 5.7 Litre V8	70-99
Volts	
	10.6
RPM	
4.1 Litre L6	6200-10700
5.0 & 5.7 Litre V8	7800-12000
Motor Drive	
Engagement	Solenoid
Pinion tooth no	9
Flywheel tooth no.	
4.1 Litre L6	153
5.0 & 5.7 Litre V8	168

DISTRIBUTORS	4.1 Litre L6	5.0 Litre V8		5.7 Litre V8	
	L22	LG3		LM1	
Model	1110681	1103239	(1103244)	1103246	(1103248)
Type	High Energy Ignition				
Centrifugal Advance begins @ RPM	0° @ 1000	0° @ 1200	0° @ 1000	0° @ 1200	0° @ 1200
Max. degrees @ RPM	20° @ 4200	20° @ 4200	20° @ 3800	22° @ 4200	22° @ 4200
Vacuum advance begins @ kPa (In.Hg.)	0° @ 13.5 0° @ 4	0° @ 13.5 0° @ 3	0° @ 13.5 0° @ 3	0° @ 13.5 0° @ 3	0° @ 13.5 0° @ 3
Max. degrees @ kPa (In. Hg.)	24° @ 50.0 24° @ 15	10° @ 27.0 10° @ 8	20° @ 33.8 20° @ 10	18° @ 40.5 18° @ 12	10° @ 27.0 (10° @ 8)
Timing (initial design setting) Crankshaft deg. @ RPM with vacuum line disconnected	6° @ 550	8° @ 500	6° @ 500	8° @ 500	8° @ 500
Timing Mark Location	Torsional damper				

NOTE: Items bracketed () are specific to California.

TRANSMISSIONS

TURBO HYDRA-MATIC

Application		4.1 Litre L6 & Station Wagons	5.0 & 5.7 Litre V8. Sedans & Coupes	
General Data	Type	Automatic hydraulic torque converter with compound planetary gear system - three forward speeds and reverse		
	Selector lever	Location	Steering column	
		Operation	Actuates controls by a hydraulic system from pressurized gear type pump	
	Parking Lock	Quadrant pattern	P-R-N-D-L2-L1	
		Type	Locking pawl	
	Operation	Applied by selector lever through manual linkage		
	Method of cooling	Water		
	Flywheel assembly	Steel stamping with welded on ring gear		
Oil pressure pump	Supplies hydraulic pressure from an engine driven gear type pump			
Hydraulic System	Type	Steel spool valve		
	Valves	Manual	Establishes range of transmission operation	
		Pressure regulator	Provides main line pressure	
		Shift (1-2)	Controls oil pressure for transmission shift from 1-2 or 2-1	
		Shift (2-3)	Controls oil pressure for transmission shift from 2-3 or 3-2	
	Modulator	Regulates line pressure with modulator oil pressure which varies with torque to transmission		
	Accumulator	Provides greater flexibility in attaining desired shift quality for various engine requirements		
	Pressure @ Idle (a)	Drive	60	55
L2		87	80	
L1		87	80	
Reverse		91	84	
Converter Assembly	Pump (Drive member)	Multivane type, sheet metal blade spot welded to steel pump housing that is an integral part of the converter housing		
	Turbine (Driven member)	Steel axial flow blades assembled between inner and outer steel shells		
	Stator assembly	Aluminum multivane type blades mounted on a one way (overrunning) roller clutch		
	Stall ratio	2.00	2.35	
	Stall speed (RPM)	2110		
	Diameter (nominal)	298.4 mm (11.75 in.)		
Planetary Gear Set	Reaction carrier assembly	4 steel pinion gears		
	Output carrier assembly	4 steel pinion gears		
	Intermediate band	Circular steel with organic lining		
	Range	D (Drive)	2.52:1 - 1.52:1 - 1.00:1	2.74 - 1.57 - 1.00:1
		L2 (Low two)	2.52:1 - 1.52:1	2.74 - 1.57:1
		L1 (Low one)	2.52:1	2.74:1
R (Reverse)		1.94:1	2.07:1	
Servo Unit	Piston with release spring and inner cushion spring			
Case	Material	Aluminum		
Clutches	Type	Four, multiple disk	Three, multiple disk	
	Material	Driven plates	Steel with bonded organic facings	
		Driven plates	Flat steel	
	Forward clutch	5 each drive & driven plates	4 each drive & driven plates	
	Direct clutch	4 each drive & driven plates	3 each drive & driven plates	
	Intermediate clutch	3 each drive & driven plates	- - -	
	Low & Reverse clutch	5 each drive & driven plates	4 each drive & driven plates	
Release spring	Radial row steel coil			
Torque Multiplication	Drive (maximum)	5.04:1 to 1.00	6.44:1 - 1.00	
	Low 2	5.04:1 to 1.52	6.44:1 - 1.57	
	Low 1	5.04:1 to 2.52	6.44:1 - 2.74	
	Reverse	3.88:1 to 1.94	4.86:1 - 2.07	
Governor	Type	Cross-axis centrifugal		
	Operation	Regulates a pressure proportional to car speed which acts upon the (1-2) (2-3) shift and modulator valves		
Lubricant	Type	Dexron II		
	Capacity	Dry	9.5 litres (20 pints)	9.5 litres (20 pints)
		Refill	3.8 litres (8 pints)	3.3 litres (7 pints)

(a) 600 RPM input



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